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Abstract

This thesis discusses Äänijooga (sound yoga), an event series and practice consisting of yoga sessions done within an interactive live sonic environment. It documents the treatment of sonic composition and yoga routine by linking sonic and physical gesture, somatic philosophy, and discusses comparative practices and participants' experiences during Äänijooga events.

Gentle forms of yoga are done within a sound environment, and both activities are produced in a way as to reinforce and benefit each other. The practice of Äänijooga draws on listening practices such as soundwalking and Pauline Oliveros' listening exercises and various forms of yoga and meditation.

Äänijooga uses a multi-speaker setup, immersive and site-specific sonic environments built with MAX 6, and often uses projected audio-reactive visuals built with VDMX. The placement of projectors, number and placement of speakers, visual behaviour and aesthetic, sound selection and behaviour, and particular focuses of the yoga sequence/asanas are all taken into account each time an Äänijooga event is held in a different space.

With certified Slow Flow yoga practitioner Reeta Partanen, we created four individual sessions where both practitioner and artist attempted to mutually shape participants' experiences through using aspects common to movement and sound: intensity, pacing, direction, and sequence. By using corresponding signals and cues in multiple media to guide a participant, the goal was to deepen an individual's presence, clarity, and relaxation, as well as encouraging them to gain new insight toward listening and their body. These sessions occurred in Arkadia International Bookshop, Vapaan Taiteen Tila, Lapinlahden hospital, and Oranssi Klubi. These sessions involved approximately 100 participants in total.

Äänijooga as a series continues to grow, taking place in many well-established institutions throughout Helsinki such as the aforementioned spaces and Kiasma. It continues to be my personal and professional goal to establish Äänijooga as its own recognised practice, and introduce its practice and concept to as many different communities and audiences as possible.

Keywords sound, yoga, sound environment, wellbeing



We encountered the house of realisation,
we witnessed the body.

The whirling skies, the many-layered earth,
the seventy-thousand veils,
we found in the body.

The night and the day, the planets,
the words inscribed on the Holy Tablets,
the hill that Moses climbed, the Temple,
and Israfil's trumpet, we observed in the body.

Torah, Psalms, Gospel, Quran —
what these books have to say,
we found in the body.

Everybody says these words of Yunus
are true. Truth is wherever you want it.
We found it all within the body.

—Yunus Emre

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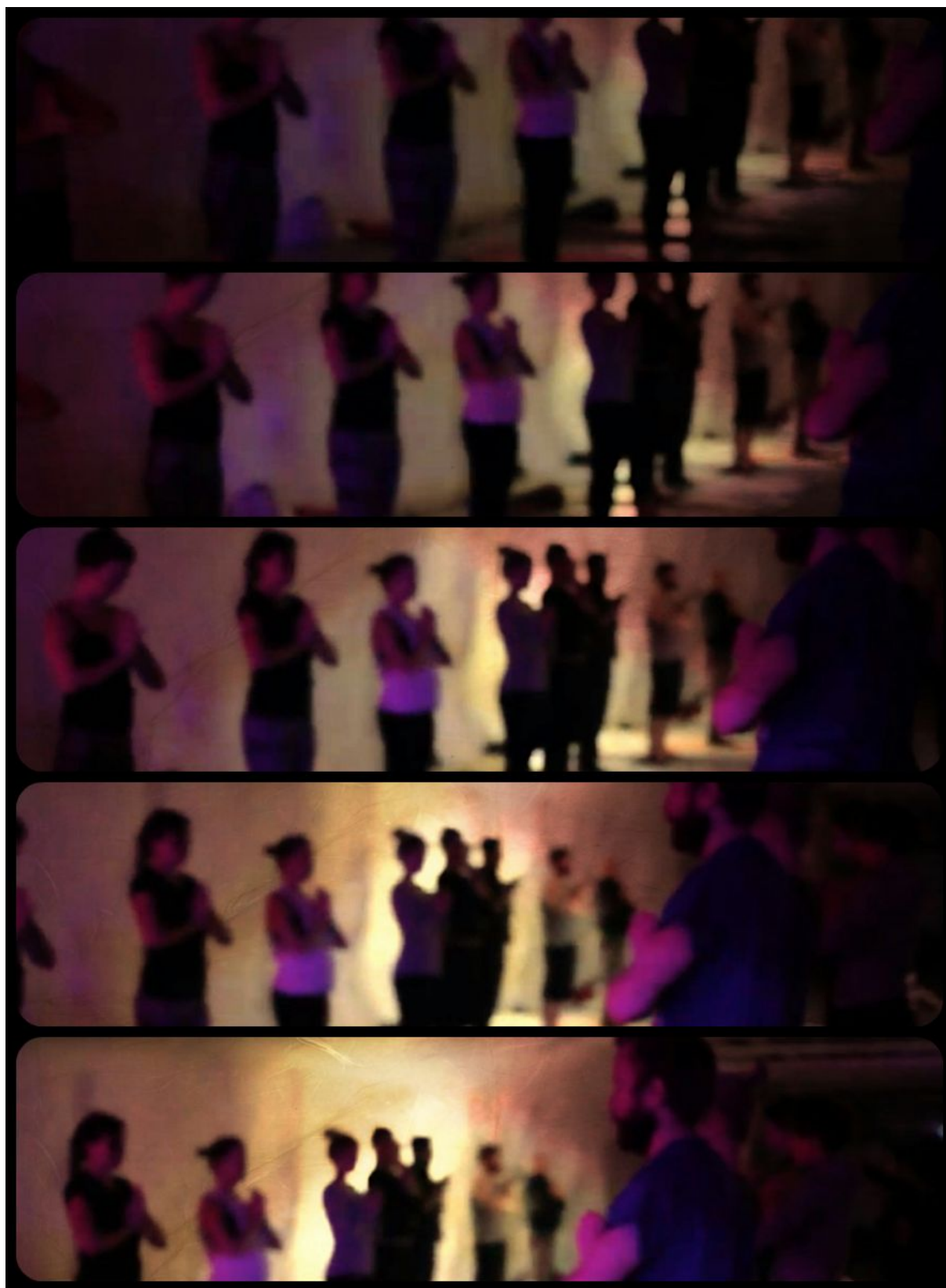


Figure 1. All united in anjali mudra

I. INTRODUCTION

This written thesis documents the development and subsequent outcome of the event series and practice Äänijooga (sound yoga), as well as research involving participants and myself about their experience with this practice. I argue that stronger wellbeing methods can be achieved by combining corresponding elements of both listening practices and somatic practices, and that the combination of these two particular forms are extremely suitable for reinforcing each other. The inspiration behind Äänijooga is to bring together older established practices with the playfulness, potential, and freshness of media technologies in a way that encourages participants to better connect with the activity they are participating in and experience a new side of something familiar.

HOW THIS THESIS IS STRUCTURED

The first part of this thesis (Chapters I–V) deals with the conceptual, theoretical, and comparative aspects of this work. The current chapter outlines my personal background and thesis structure. Chapter II describes how the practical portion of Äänijooga came to be, as well as delving into as much as is relevant concerning the histories of Äänijooga's constituent practices. In chapter III, I discuss yoga practices that incorporate sound and music, as well as pointing out conceptual and practical advantages and disadvantages of each. Outlined in the fourth chapter is a personal reflection of the aspects of yoga and listening methods that make them beneficial for working with separately, as well as detailing why they are complementary together. Chapter V contains the bulk of the theoretical work that has gone into this thesis, detailing my arguments for somaesthetics and discussing some of the potential issues with other somatic philosophies. I discuss the incorporation of gesture (both sonic and physical) into the design processes of my work, as well as discussing the ways in which feedback loops and ecology play a large part in Äänijooga.

Part Two of this thesis is comprised of the practical and descriptive parts of Äänijooga. Chapter VI contains descriptions of the event spaces and technical setups, the patches I built for each event, and an account of the design choices and approaches I used to execute each event. This chapter also details the choice of sonic material used during each Äänijooga session. Chapter VII

contains research results from the Äänijooga events in the form of qualitative interviews held between myself and various Äänijooga participants. Additionally included in this chapter are further thoughts from both myself and Reeta Partanen outlining some of the deficits and strengths of these events. The last chapter contains conclusions and explains plans for the future of Äänijooga.

WHO I AM

"It is a painful thing to say to oneself: by choosing one road I am turning my back on a thousand others. Everything is interesting; everything might be useful; everything attracts and charms a noble mind; but death is before us; mind and matter make their demands; willy-nilly we must submit and rest content as to things that time and wisdom deny us, with a glance of sympathy which is another act of our homage to the truth." Antonin Sertillanges

I've often thought perhaps it would be useful to have business cards that say "Ava Grayson: your guess is as good as mine." I tell people I came from a classical composition background, but I didn't take up the formal training that had gotten me into a music degree until I was 20. I was always tinkering with many things: playing guitar and singing in cover bands to pay rent throughout high school, growing up in a family of oil painters, constantly 'experimenting' in the kitchen (as many friends and family members ruefully called it), sewing, writing bad poetry, cutting and dyeing friends' hair in rented apartment bathtubs...basically just being creative whenever I could. Maybe with this mosaic of interests I could have foreseen that by the end of 5 years of post-secondary music school I still wouldn't know what to call myself. Composer? Artist? Each name has a set of connotations, some of which I might not subscribe to. However, being uncertain showed me that other things were indeed certain: that the media I dreamt about working with were diverse, that I wanted to actively experience something alongside others in whatever I made, and that what I created had to be something that had the potential to connect people through a shared experience.

I spent my first 2 years at Aalto trying to develop thesis ideas that had all the appealing elements of Äänijooga but, for one reason or another, just didn't feel like *the* idea. In the meantime I was working for Aalto's Artist-in-Residence, which fueled my imagination through our research and bolstered my excitement for listening practices by actually keeping us out in the city and community, soundwalking, listening, and dialoguing with other artists and member of the public. It was a fantastic learning experience and it could have easily sufficed as a Master's thesis on its

own. However, I wanted an idea that I could keep going with beyond the job contract, even beyond this thesis, and I wanted it to be my very own.

It is now late summer 2015. My friend and fellow Sound in New Media classmate Tuomas posts an article on my Facebook wall from Vice magazine's music news, entitled *Noise Yoga is a Thing—and It's Actually Pretty Sick*. I think it's pretty entertaining, but am a little aghast at the recording I find—a giant wash of industrial sludge with a yoga teacher having to shout instructions over top. It is broadcast over a DIY attic radio station that also claims to broadcast found sound and paranormal encounters. The noise yoga series is curated by a man named Corporal Tofulung and taught by yoga instructor Baba Bundtcake. West coast hippies, I think. I chuckle to myself with a little condescension, but after a couple of days I am still catching myself thinking about what a great concept it is. I can readily envision how I would approach noise yoga: playful, pretty, and gentle. If I *really* pull it off, maybe it could even be charming.

The chance to make Äänijooga a reality finally came about after speaking to the same friend over lunch about his Facebook post. He mentioned that our mutual friend Reeta had recently finished her yoga certification and might be interested in trying something like this. I got ahold of her, and from the first discussion I knew things were going to go well: both of us voiced the desire to help others through our respective skills, donate whatever proceeds we made from the events to good causes (predominantly Finnish Red Cross), and do it for the love and enjoyment it could bring. Our friend Heta Kaisto—a doctoral student in Visual Cultures and tour guide at both Ateneum and Kiasma—immediately jumped on board as our volunteer producer, and within three weeks we had accomplished our first Äänijooga event.

Aside from this idea being something I could really feel happy calling my own, the main reason Äänijooga survived as a concept when others didn't was because it employs so many of my personal and professional interests. I'm very interested in how gesture translates from one form into another, and during my bachelor degree studied the link between sonic and visual gesture in graphic scores. I also thought about similar concepts quite regularly in Marianne Decoster-Taivalkoski's class at the Centre for Music Technology, which dealt with exploring physical and sonic gesture. Regarding yoga, I've practiced it on a relaxed but nevertheless engaged level for the last three years. Having spent nine years living on the West coast of Canada, I've been involved in many activities and workshops that were based around wellbeing practices, both somatic and aural, leisurely and therapeutic. And lastly, I'm very interested in helping to build the kind of community that comes from people participating in group awareness and wellbeing methods. It can certainly only do good, socially, communally, and spiritually.

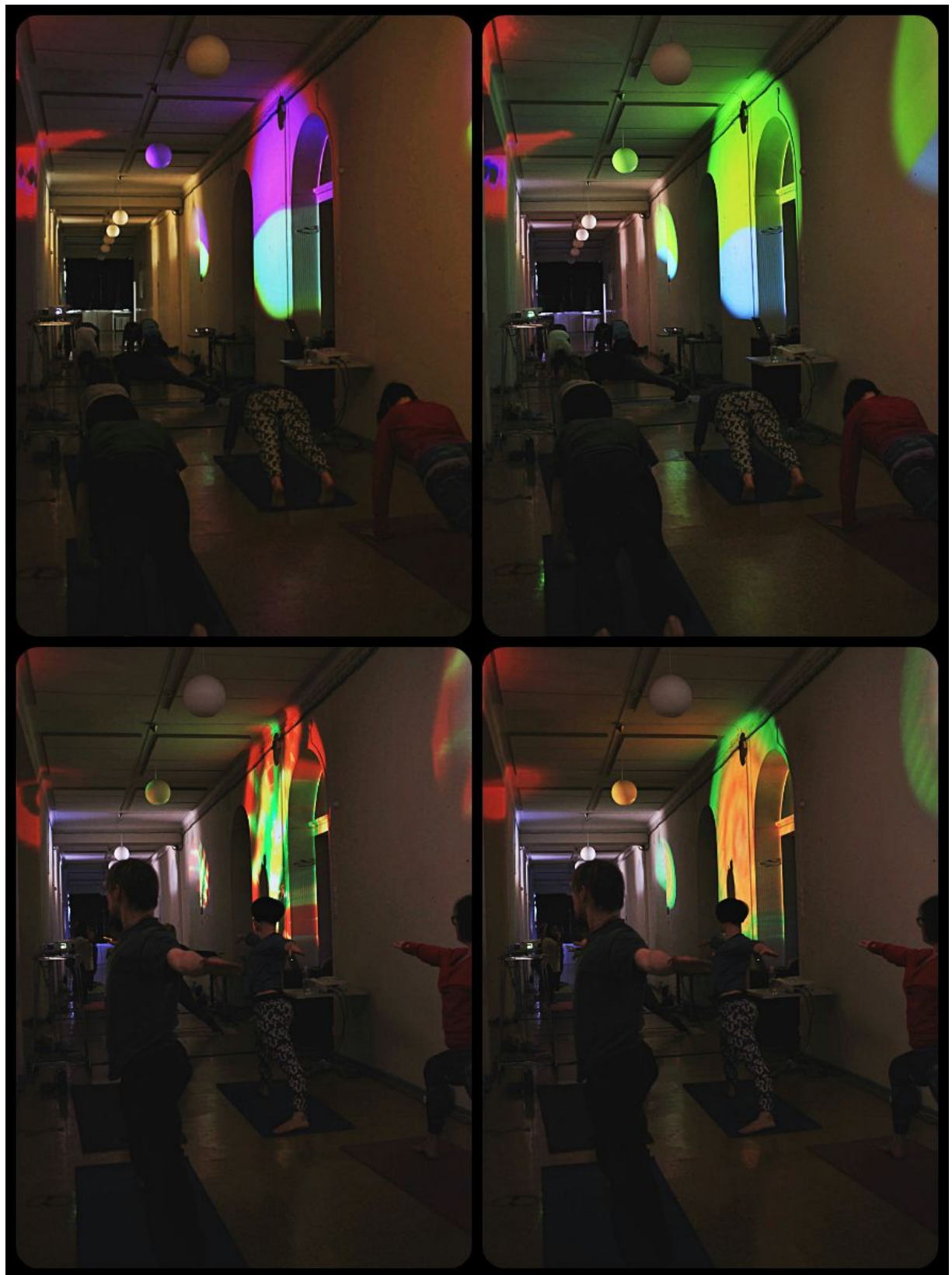


Figure 2. Warrior II pose and shifting colours

II. BACKGROUND

Äänijooga (sound yoga) consists of a gentle yoga practice performed within an interactive, multi-speaker sound environment. The methods that Äänijooga draws from and employs consist of listening-based mindfulness practices such as Pauline Oliveros' Sonic Meditations, soundwalking, and listening walks, as well as established but modern yoga. All of the elements that comprise Äänijooga are tailored in order to reinforce and strengthen all other aspects.

The sonic elements of Äänijooga are presented in a ludic way; the participants are introduced to listening methods in the form of subtle verbal and nonverbal prompts during the Äänijooga sessions. Sonic gestures are employed in a way as to correspond to the asanas and sequences, and with the guidance of yoga practitioner Reeta Partanen, asanas and sequences are modified in a way that allow participants space and time to listen as they move. Audio-reactive visuals are often included during these sessions and designed in a way that correspond closely to the sonic material, thus further reinforcing a participant's experience. The mapping of physical and sonic gesture is based on practice-based research I had participated in during Marianne Decoster-Taivalkoski's class, entitled The Exploratorium of Physical and Sonic Gestuality. The basis of mapping visual and sonic gesture stems from my interest in the linkage of the two within graphic scores, which I studied during my last degree at the University of British Columbia. My own personal studies regarding both listening exercises and yoga also play a part of the formation of Äänijooga.

Äänijooga is always created using a multi-speaker setup and an immersive, site-specific sonic environment designed for the space in which it is diffused. The interfaces for the sound environments are built using MAX 6, and the sonic material is either generated through synthetic means or created with field recordings and free sound samples gathered from my personal collection. Audio-reactive visuals are often used, built by Antti Hietaniemi using VDMX and projected onto the walls and ceiling of Äänijooga spaces. The particular focuses of each yoga session are also adapted to the specific context in which each Äänijooga event exists.

There are 3 main aspirations that drive the formation, planning, and execution of each Äänijooga session:

1. Learning in one's unique way how to better observe the moment, ourselves, and our surroundings.
2. Having this observation occur in a creative, experiential environment.
3. Having this environment consist of a combination of bodily practices with technological tools, and doing this in a way that is both ubiquitous and harmonious.

The reasoning behind these aspirations can be reduced to the desire to form a wellbeing practice that fits to my own aesthetic tastes, values, and creative bent. It is necessary that in the investigation of forming a new wellbeing method, it is created in a way in which I would feel fully drawn to participate in, enjoy, and derive insight and/or experience from.

While designing (or guiding the design of) the sound environments, yoga routines, reactive visuals, the execution of each of the four Äänijooga sessions, the interviews I conducted with participants, and my own conclusions, I have focussed not only on the 3 aforementioned goals, but also on the two research questions that follow:

1. Can elements of yoga and sound be utilised together to create a coherent wellbeing form more beneficial than the sum of its parts?
2. Can elements of yoga and sound be utilised together to create a wellbeing form more beneficial than similar alternatives (i.e. yoga with live musician, pre-recorded songs, etc.)?

These research questions as well as the goals of Äänijooga will be discussed in depth in Chapter VII, where relevant feedback and reflection will also be presented.

A (VERY) BRIEF HISTORY OF YOGA

Though everyone reading this will have some understanding as to what modern, highly-Westernised yoga looks like, many of us don't have much more than a cliché set of images in mind as reference to this practice. This modern and modified form of one the 'pure' Yogas, Hatha Yoga, has brought many of us with even just a novice attitude and gym pass

improved relaxation, flexibility, and health benefits, which is certainly nothing to deride (Wengell and Gabriel, 243). I myself do not utilise the deeply inbuilt religious aspects of Yoga. However, in discussing Yoga as something from which I have derived my own practice, it is important to outline how what I am doing follows current trends, and how a trend such as yoga came to be what it is today.

Yoga classes are offered at pretty much any gym these days, and most of us recognise the spiritual elements that the more 'hippie dippie' of us might gravitate toward. However, most of us aren't aware that, according to modern archeological digs, Yoga has existed for approximately 7,000 years (ibid., 240). What we recognise as a physical and perhaps spiritual practice is derived directly from a deeply religious set of beliefs, doctrines, and philosophies. Though elements of Yoga have found their way into Greek philosophy and through leaders such as Alexander the Great, it wasn't until the overthrow of India by Britain in 1858 that this practice made its way back into Western culture (ibid., 240). And although its influence over figures such as Tolstoy and Ralph Waldo Emerson was already happening by the 1890s, as well as an American sect of Yoga gurus emerging as early as 1920, it wasn't until the 1960s that mainstream culture began to latch onto this practice in earnest (ibid., 241). The counterculture movement was easy to explain in the case of the Baby Boomers: skepticism towards morality, sexuality, institution, fundamental Christianity and Catholicism, and capitalism was happening everywhere (ibid.). This generation was exploring alternative answers in the form of mind-altering drugs, Eastern religion and spirituality, and trying to find contentment through lifestyle practices that were entirely different from that of their parents. Through the want to abolish the materialistic ideas of the West (while being catered to by capitalism encouraging that same abolishment through offering fashion and lifestyle alternatives posing as less Western), many of the youngest of this generation began daily meditation routines, Hatha Yoga practices, or the looking toward a more tolerant Taoist, Buddhist, or Yogic set of beliefs as a guideline as to how to live life (ibid.).

Despite many of the Flower Power generation becoming students in earnest of learned gurus and delving into the studies of these religions in a deep and personally meaningful way, the practice of Yoga itself had already been heavily influenced by Westernisation as early as the 1920s. The first American gurus such as Bishnu Ghosh had seen it more befitting to focus on the more physical aspects and benefits of Yoga because of the fact that Americans were already far too obsessed with their bodies and immersed in deeply Christian beliefs to benefit much from Yoga's religious elements (ibid., 240–243).

With the development of Bikram yoga beginning in 1974 and the increasing demand for its franchise throughout the 70s and 80s, Bikram Choudury became the single most influential figure in the American yoga scene until it exploded into a mishmash of sub-genres and schools in the early 2000s (ibid., 244). To date, millions upon millions of Westerners practice yoga in some form or another, and a yoga studio can be found in nearly any sizeable town.

AN EVEN BRIEFER HISTORY OF SOUND PRACTICES

I consider myself fortunate to have been exposed to listening practices by living in the region from which they grew, namely the Pacific Northwest and the coast of British Columbia. This is where composers like R. Murray Schafer, Hildegard Westerkamp, Barry Truax, and Pauline Oliveros have spent their respective careers bringing awareness and attention to the deeper self, environmental issues, and specificity of place through their teachings, pieces, and written works.

SOUNDWALKS AND LISTENING WALKS

It was in the latter half of my bachelor degree that I became involved with the Vancouver Soundwalk Association and learned about Schafer's pioneering in the field of sound ecology. Schafer began the World Soundscape Project along with a collective of four other Simon Fraser University composers in 1973. The project consisted of publications detailing sonic analyses and narratives from the different geographic locations in an attempt to better understand environmental issues at the time, many of which to this day are still only addressed in writing or largely ignored. Related to the World Soundscape Project is the World Forum for Acoustic Ecology (WFAE), which was founded in 1993 by those with connections to the World Soundscape Project. Though the field is growing bit by bit due to its advocates' growing ability to archive and connect online, sound ecology is still unfortunately sitting on the fringe of acknowledgement by other closely-related fields. Even after many years of involvement with sound and music, I'm always surprised by how many of my peers and colleagues have never participated in a basic listening walk. Why it remains such a niche field is, I suspect, due to the fact that environmental awareness from a sonic angle might seem to many vaguely occultish and highly ineffective in nature because of the way listening is portrayed in our culture: ears are for headphones, for chatting, for pleasure. In addition, I would hypothesise that due to the fairly recent founding of groups like WFAE and the still-developing fields of acoustic ecology and soundscape ecology, as well as the high environmental awareness being present in only small

pockets of North America, the amount of people who would gravitate toward such issues is small, albeit growing.

Soundwalks and listening walks are first mentioned in R. Murray Schafer's work entitled *The Tuning of the World*, where he defines a soundwalk as "an exploration of the soundscape of a given area using a score as a guide" (Schafer, 736). The score consists of a map, and may also contain ear training exercises, such as comparing pitches or rhythms heard along the way. There is also a difference between merely listening to a soundscape (audience) and participating with a soundscape (composer/performer) (ibid.). More loosely constructed, a listening walk is merely a walk in which the focus is listening to the environment. Both of these practices have been used quite frequently as tools for sketching compositions, understanding the locale of spaces in which people pass through daily, and developing what Schafer calls 'ear cleaning'—a term I find somewhat off-putting, but nevertheless an invaluable skill that is useful far beyond just those who work in audio and music-related professions (Schafer, 715–717). Ear cleaning, Schafer describes, is the term for learning how to listen, factually, deeply, and with a keen understanding of what is happening (ibid.). He places a particular emphasis on a respect for silence, especially given our rushed and nervous society (ibid.).

DEEP LISTENING AND SONIC MEDITATIONS

Deep Listening and Sonic Meditations are both pieces and methods developed by American composer Pauline Oliveros. Oliveros began her awareness-based pieces in the early 1970s, and the Sonic Meditations are the first set of pieces designed to help increase sonic awareness. She states in the introduction of the score: "With continued work some of the following becomes possible with Sonic Meditations: heightened states of awareness or expanded consciousness, changes in physiology and psychology from known and unknown tensions to relaxations which gradually become permanent. These changes may represent a tuning of mind and body" (Oliveros, 1974). Contrary to the traditional purpose of a score, the introduction states that "music is a welcome byproduct of this activity" (ibid.).

Her Deep Listening projects came out of an experience within a cistern in 1988, which bore from it the idea of creating music that accentuates the space in which it is performed. Deep Listening methods have been developed alongside a Deep Listening Orchestra and a series of recordings that are meant to encourage listening on, simply put, a deeper level. Over the years Oliveros has developed a training method so that those interested can also become Deep Listening practitioners of her own wellbeing and healing approach.



III. A COMPARISON

Since the boom of yoga in the 2000s, there have been many novel, fun events and genres that have incorporated different elements into pre-existing yoga practices. I will be looking at various examples of this incorporation, and positioning my work in relation to these other combinations of sound and yoga. Though there are many practices involving the voice with yoga, there are certain reasons why comparing Äänijooga to these would be problematic: firstly, most of these practices are based around mantras or chants which are believed to carry certain powers, and secondly, use of words or of the voice itself is an entirely different method and carries different functions than those in which sound is produced by specific person such as a musician. I do not approach Äänijooga with the belief that the sound itself has healing ability, but rather that the sound is a tool through which a participant can learn to better attune themselves to their surroundings, find pleasure, and/or gain better focus on the physical movements they are performing. The examples I will be looking at and discussing are sonic sadhana, noise yoga, and music-related genres such as metal yoga.

SIMILAR PRACTICES

SONIC SADHANA

Sonic Sadhana is a project by German sound designer Timo Preece and yoga teacher TJ Jackson, and is probably the closest project to Äänijooga in background, aesthetics, and goals that I have found. It is both a set of sound meditations, as well as an event series/tour that is ongoing. Preece is a certified Avid and ProTools instructor, and it is apparent in his choice of sound material, manipulation, and mixing that he is well-trained with the software he uses and has an audibly coherent and distinct aesthetic.

There is no video available online to be able to gauge how the classes are conducted by the yoga practitioner, nor how Preece and Jackson interact with the participants and each other, so I will not attempt to compare Äänijooga and Sonic Sadhana in these regards. However, based on the description, it would seem that both of these practices share some similar characteristics. Sonic Sadhana, “is a unique, experiential interplay between guided meditation, movement, breathwork, and sound bath harmonics” (ibid.). Preece states that he uses these techniques to

“resonate, align and harmonize the cellular and energy bodies and access deep states of mindfulness” (ibid.). In Äänijooga, the sound itself is not advertised as having healing properties, and I do not want to convey that the sonic aspects of Äänijooga do anything more than encourage one to listen more deeply or gain a pleasant experience. However, there is potential that either of these practices may induce a deep state of mindfulness, and both practices utilise guided meditation, movement, and breathing as tools during the course of the sessions.

The ways in which Preece stylises some of these tracks differs quite a bit from the techniques and tools I may choose during an Äänijooga session, predominantly because of this difference between sound as direct healing tool (as in the case of what Preece claims) and indirect healing tool via listening practice (in the case of Äänijooga). He lists using vedic, planetary and chakra tunings, as well as cymatics as part of his technique. In contrast, my technique includes sound chosen only for workability or aesthetics, and an awareness of how direction, intensity, pace, and sequence have an effect on how participants move and focus their attention (ibid.). Preece also uses binaural beats, which are often believed to activate or stimulate certain brain frequencies. Though I do use overtone beating quite frequently when quite active yoga sequences are being performed, I do not use specific frequencies. This technique is something I use only to produce a pleasant physical sensation and to increase stimulation to support the increase of physical movement.

Overall, the sounds that Preece chooses are tasteful, carefully crafted, and stylistically not very far from what one might expect to hear of current meditation music. Many of the sounds he chooses are sounds I would also be inclined to use depending on the space in which our sessions are held: bells, singing bowls, sine waves, and atmospheric synthesised sounds.

NOISE YOGA

Noise yoga is the original idea from which I derived the concept of Äänijooga. Though a verbal explanation of both noise yoga and Äänijooga could resemble each other almost identically, the main difference is that the aesthetics, guidance, and thresholds are much more controlled when it comes to Äänijooga. It is not to say that these Seattle-based artists and yoga teachers do not carefully choose what they teach and play, but rather that the artists and teachers vary every show, whereas Äänijooga purposefully only has one yoga teacher and one musician for the sake of consistency and working rapport. The main aim is very clear from the way that noise yoga is conveyed the main focus is getting away from bland, ‘fluffy’ yoga tracks and into an

environment that would attract music and sound lovers with more avant-garde and adventurous tastes. I think this goal is commendable. Much of the same can basically be said of Äänijooga—I am undoubtedly trying to steer clear of cliché sounds and utilise techniques and materials that would be interesting for a whole range of people. However, beyond the novelty, and beyond pushing participants' genre-based boundaries, it is important to note that Äänijooga is also an ongoing study of how to consistently merge sound and yoga into a new form that is beneficial because of this amalgamation, not coincidentally nor despite.

MUSIC-RELATED YOGA

There are many different yoga events that include one-off events, ongoing series, and emerging genres that are based on certain musical genres: metal yoga, reggae yoga, Nick Cave yoga, and Voga, to name just a few. These yoga events or series are all based on a common interest in either a specific genre or a specific artist, and are often highly stylised to suit the aesthetics of said genre. The yoga practice can vary quite a bit depending on the intensity of the music, and can also be hybridised as in the case of Voga, which draws both influences from 80s music and Voguing (a dance style which emerged from the 1980s gay and drag dance scenes).

I will not delve into specific details of each of these subsets of modern yoga because it will not be relevant to our topic. I will, however, outline the similarities and differences. What all of these types, including Äänijooga have in common, is that they encourage anyone who wants something different than the standard yoga studio class to join, which can and often does create a richer and stronger sense of community and playfulness amongst participants. How these other examples differ from Äänijooga is that they base their musical portion on preexisting material, and place their strength almost entirely on genre or novelty.

ADVANTAGES AND DISADVANTAGES

As stated in comparison with Sonic Sadhana, Äänijooga does not advertise itself as being healing in and of itself, but rather as a development tool to help participants to use their ears and bodies in order to learn new skills or gain a new experience. It also does not rely heavily on style or genre, though aesthetic biases are unavoidable in any circumstance. Lastly, Äänijooga is highly controlled in that the yoga teacher, musician, and approaches used are consistently the same, though the sequences and sound material may change.

The advantage of Äänijooga over these other examples is that this is an ongoing research project which will, with time, be able to produce a method that is both aesthetically pleasing and beneficial from a physical (yoga) and mental (listening and meditation) standpoint. Though the sound is inevitably stylised, one of its main functions is to provide cues and correspond to the asanas and sequences. Every other example I have found of yoga and sound combined uses sound in a way that is pleasing to an ideal participant, but does not aim to correlate physical and sonic gestures so closely. The other main advantage is that because Äänijooga is created for every physical level and does not fall under a specific musical genre, it has the potential to be applied in many situations for many different groups of participants. For these other examples, the appeal is strong to whomever it strongly appeals, but for the rest of us who may have an aversion to the thought of performing yoga to 80s music or metal but still enjoy the thought of having an intense and interesting listening experience, Äänijooga perhaps appeals more.

Äänijooga's strength may also be a weakness: that in attempting to appeal to a large range of listeners, the aesthetic at times runs the risk of not being so well-defined. This is a similar disadvantage to that of the noise yoga series. I have tried during each event to find an ideal balance between creating new material for every event and still keeping the aesthetic roughly the same.



Figure 4. Dancing warrior

IV. COMING TOGETHER

Yoga and sound are a combination that are by no means new: nada yoga, a practice as well as an Indian metaphysical system, is the exploration of consciousness through sounds (Sundar, 401). Through becoming increasingly conscious of *ahata* (outer music, or sounded music) and *anahata* (inner music, or inner sound), an individual can achieve balance and harmony (ibid.). Different manifestations and evolutions of sounded music are believed to resonate and harmonise with particular chakras (energy centres within the body) (ibid.). Very much like nada yoga, the elements of *ahata* and *anahata* are present in Äänijooga: each participant is immersed in a sound environment containing nonverbal gestures and listens to verbal instructions, both of which form the *ahata* component. While experiencing these and following their guidance, an internal listening also occurs: emotions will rise and fade, thought processes will take place, and sensations within the body will mirror the environment or reflect what is happening. This part forms the *anahata*, and it is through the consciousness of these two elements that a participant can gain a greater understanding and experience of what it means to listen in a broad sense.

FURTHER REFLECTIONS ON YOGA

In the brief history of yoga I outlined that as early as the 1920s yoga had already been tailored to an American audience with a preoccupation toward their physicality. This may have been problematic for gurus who believed very deeply the religious aspect of their practice—after all, practicing often immobile asanas that hardly resemble any current idea of yoga was a main component of some of these gurus' physical practices. However, like Wengell states, there is no need to deride the fact that people are nevertheless experiencing benefits from subscribing to yoga as merely a physical activity or mild relief from stress (Wengell and Gabriel, 241). My reasons for finding the yoga segment of Äänijooga an appealing implement for developing further wellbeing methods is because of its flexibility, current popularity and acceptance, and its potential to expand into deeper meanings if deeper meanings are desired. These are undoubtedly some of the reasons it has found so many other advocates in recent years.

My personal reasons for coming to a yoga practice of my own these last few years are because of the following:

1. Simplicity. I found myself doing a lot of traveling, often sleeping on hosts' floors, and wanted to be able to do something quiet and unobtrusive while still practicing some light physical routine.
2. Expandability. As stated before, those with a spiritual or religious bent can find a richness of history and a flexibility between how much mind training versus how much physical training can be practiced. For myself, I choose a pragmatic and quite Western approach to yoga: it helps keep my spine healthy, keeps me building personal goals in small ways that I can practice daily, and helps me learn to still and calm my mind. I may not care to hypothesise deeper on the state of my soul through this practice, and I may not be particularly interested in devoting the majority of my time studying the cultural roots of this religion/practice. Perhaps this means I am guilty of cultural appropriation. However, I think that being an advocate of any form of yoga and encouraging others to develop and use it as they find beneficial and meaningful is within the spirit of Yoga itself.
3. The capacity to integrate with other practices. Various listening exercises and yoga complement each other wonderfully. Being flexible and non-disruptive to almost any other routine, it can be highly adapted to the physical, spiritual, or mental needs of the individual. Yoga has become an especially good practice for using alongside other physical and mental therapies and treatments in order to more fully benefit a person as a whole.
4. Accessibility. I have taught myself predominantly through yoga classes available online and through studying poses, sequences, and terminology available on a couple of reputable yoga websites. This has all been available to me for free, and the online resources, forums, and peer groups are plentiful. If I chose to seek out a private teacher or a regular class to attend, I would be able to find a suitable teacher or studio with relative ease.

FURTHER REFLECTIONS ON SOUND

In relation to yoga, listening practices are much less widely known. I would guess that the average person who is not involved in sound or music training might not even be aware that such practices could exist. However, many of the aspects of yoga that make it easy to acquire and appreciate also apply to listening practices.

The advantages of listening practices:

1. Simplicity. Listening exercises can be done pretty much anywhere. Aside from those who suffer from hearing impairment, some version of intent listening is accessible to us anywhere and at any time. There is always something to listen to, and we are never in true silence.
2. Creativity and flexibility. The possibility to use or modify listening exercises such as those created by Pauline Oliveros is already quite extensive, but one can also devise their own ways of listening. It could be as simple as sitting on the beach and listening to the waves, or as complicated as creating complicated listening games and exercises involving others. It can be done in the spare moments while going from place to place on the bus or waiting at the doctor's office, and is therefore a practice that can enrich the mundane moments in one's life substantially.
3. The capacity to integrate with other practices. Since listening is not at all a physically strenuous activity, there is no other practice with which it would run the risk of interfering. It is at worst harmless, and at best enlightening and transforming.

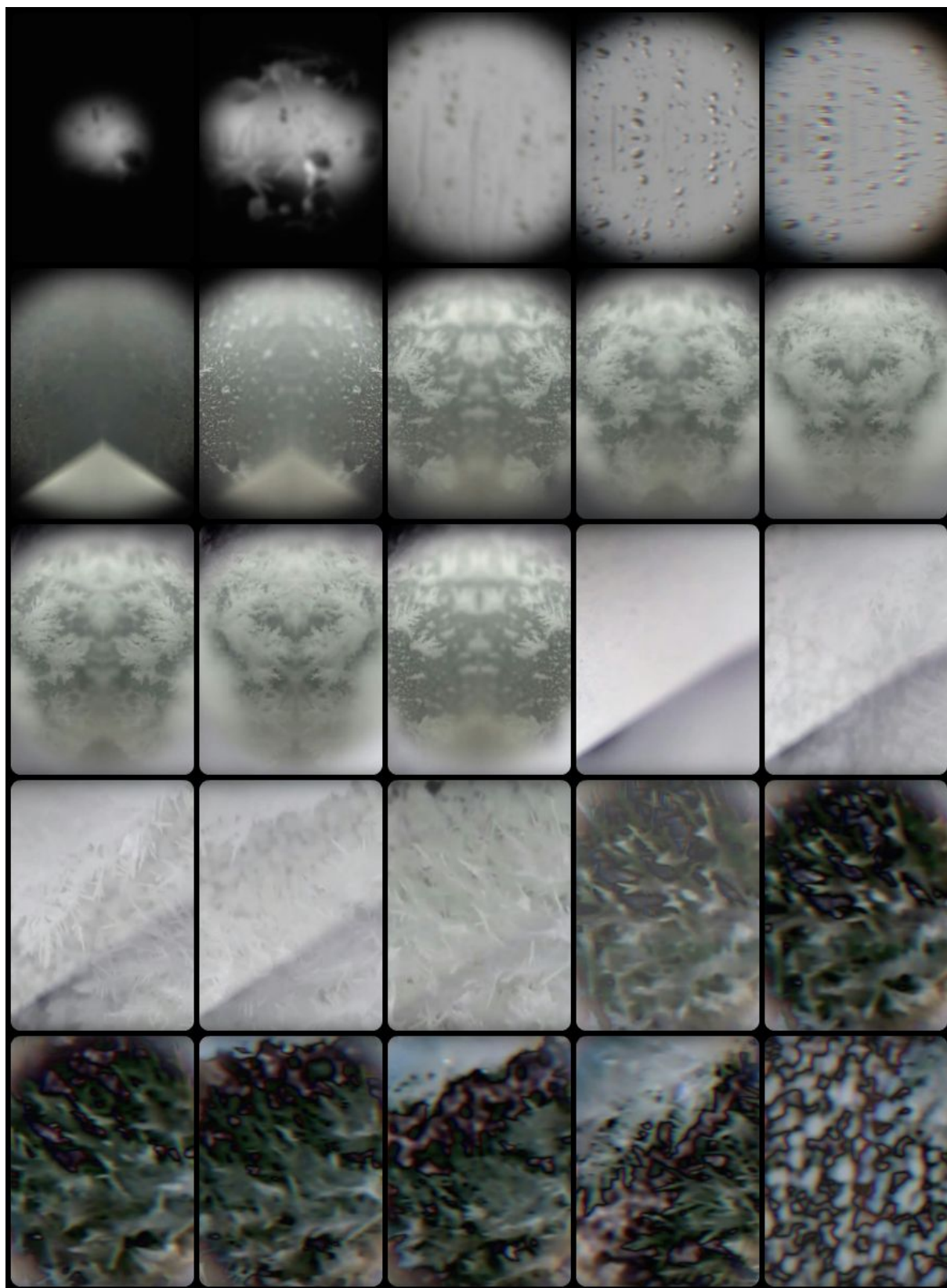


Figure 5. One hour of visuals (a slow evolution)

V. THEORY AND CONTEXT

In this chapter, I explain the four theoretical backgrounds that comprise the conceptual workings of Äänijooga. Firstly I will discuss somaesthetics, a branch of body philosophy that I feel goes beyond other many other body philosophies in its call for a practical applications to real-world issues. Secondly, I discuss concepts regarding sound and listening that are particularly relevant to this thesis. Thirdly, I discuss how both somaesthetics and the concepts behind listening practice tie into the idea of the ecological body. A simply outlining of gesture theory that has been utilised in the design of the sonic and physical elements of Äänijooga are presented. Lastly, I summarise this chapter by explaining briefly how all four of these approaches to sound or the body all correlate with each to produce a coherent view.

SOMAESTHETICS

*Our body loves us,
and even while our spirit drifts dreaming
works at mending the damage that we do.*

*For all these centuries of fairy tales poor men
butchered each other in the name of cure,
not knowing an iota of what the mute brute body knew. (Updike, 19)*

In this portion of the chapter, I want to speak about body philosophy. Much like the form of Äänijooga itself, which pushes and merges beyond what is already in existence for the expansion of experience and knowledge, the philosophy that I want to discuss—somaesthetics—also demands to go beyond the existing accepted models. I feel that we are in a time that desires to move beyond itself, and to quote Susan Kozel:

Witness the expansion of people practicing yoga, martial arts, extreme sports, the extreme (or extremely banal) emotional narratives of reality TV, the upsurge in adventure travel, the continued alteration of our moods and physical well-being with diet, alcohol, and drugs, both legal and illegal, and the transformation of our bodies through fashion,

piercing, tattooing, and reconstructive surgery. All of these indicate either that our current mental and physical states are intolerable and we are desperate to converge them with some sort of norm (the ideal nose, or Orlan's more sinister take on beauty), or that we are searching for, even craving, something new. These may be the indulgences of an affluent Western middle class, but the basis is the desire for an expansion of perception, of consciousness, and of bodily experience, and a sense that what currently exists needs to be transformed. (Kozel, 7)

Mark Taylor, as quoted by Kozel, further supports this view when he discerns the "need to develop new ways of understanding the world and interpreting our experiences," namely because of an "extraordinary complexity when systems and structures that have long organised life are changing at an unprecedented rate" (ibid). Mind you, these words that Taylor stated are already 15 years old, at a time when the dial-up modem was only just beginning to run the risk of endangerment. Think about the much greater need now to reevaluate our systems of interpretation and understanding, and the increasing rate in which we may need to reconsider these systems. It is no wonder to me why so many of us feel the need to go to greater and greater lengths to experience something new: we have access to unprecedented amounts of entertainment, information, and never before have we had so much potential connection to others. Although these things in and of themselves are neither beneficial nor detrimental, the benefit or detriment rests in the way in which we use this access, and manage and process the information we give and receive.

The speed in which these changes have occurred even since my late eighties childhood, I think, have left the average person quite in the dark about how to be responsible to ourselves, accountable toward each other, and perhaps most importantly, how to handle our mental and physical wellbeing in the face of such changes. Through the development of different devices that now are used (or use us) in daily ways, a demand is growing for not only learning how technology shapes our interpersonal relations and our bodily habits (such as how to work in more ergonomic situations), but also thought systems that can permeate and trickle down into other areas of development.

Being a person who does not err on the side of the abstract if it can be helped, I have found many philosophical models problematic in that they speak about the body in such removed terms that the abstruseness in and of itself seems contradictory to interests of the body. Likewise, I also find that most body-related philosophies I have encountered are interesting in and of themselves, but seem to me to ultimately fail what they set out to accomplish. These

failures come down to the fact that many philosophies altogether neglect an action or application that is both resultant of the philosophy and a furthering of its cause. For instance, as Gerard Montague points out, embodiment is relevant to epistemology, for certain a posteriori knowledge could not be gained in any other way but through the senses of the body (Montague, 132). He says, "To be is to do...we cannot do anything without a body but, in the light of the millennia-long paradigm of substance dualism, the body has come off badly in the philosophical discourse" (ibid.). It sure has: being shunned and suppressed by both Western religion and the majority of Western philosophy, the body has been treated as an obstacle requiring transcendence through fasting, self-denial (both in physical and mental terms), and sublimation. "Tracing these exercises back to Socratic dialogue, Plato portrays a philosophy's life as a training in death, through the exercises of "separating the soul as much as possible from the body . . . until it is completely independent"" (Shusterman, 16). As Richard Shusterman explains in his 2008 book *Body Consciousness: Toward a Philosophy of Mindfulness and Somaesthetics*, "these ancient lines of critique, adopted by Neoplatonism and integrated into Christian theology and modern philosophical idealism, have waxed enormously influential in our culture," denigrating and alienating the human body to a mere instrument (ibid., 5). If the body is merely a tool, so goes the argument, then it must be altogether different from the self who is using it, and cultivating bodily knowledge has nothing to do with self-knowledge or self-cultivation (ibid.). The fact that the etymology of the words "organ" and "organism" are derived from the Greek *organon*, meaning tool, is a clear indication that this mindset has indeed been around for a while (ibid.). This mode of thinking, I believe, is not only a fallacy in light of what we now know about the physical and chemical balances involved in things like mental illness, but is also extremely dangerous because of its imperceptibility when one is not taught to pay attention to this deeply ingrained separation. The fact that this mindset still is widely spread not only affects the quality of daily life but affects the health of society as a whole, and I do not believe that people, with rare exception, are born imperceptible to this kind of brain/body split.

The one main problem, I argue, is that with increasing amounts of choice, stimulus, and with sudden shifts in the ways in which people interact with or relate to each other, a certain kind of mental paralysis, desensitisation, or an ever-increasing threshold for better/faster/stronger stimulus can occur. Some psychologists such as Barry Schwartz believe that the bell-curve of some choice is beneficial, but that the extreme (which has currently become the norm, especially in North America) causes not only dissatisfaction, but can be debilitating enough that those faced with constant bombardment of choice actually need to reconfigure their lives to avoid the resultant stress (Schwartz). On a long-term scale and unchecked, this cannot augur well for anyone's wellbeing. "The result," as Shusterman states, "is a pathological yet all too

common need for hyperstimulation in order to feel that one is really alive, a problem that is expressed not only in substance addiction but also in a host of other increasingly prevalent psychosomatic ills that range from violent actions of self-mortification (such as cutting) to the passive nightly torture of insomnia" (Shusterman, 40).

I have come to research these philosophies not only for the sake of this thesis, but also from a personal need to better understand what is happening to me as an individual with quite common troubles. I strongly believe that philosophy is one of the possible paths to finding answers to questions both banal and lofty. When I begin to have lumbar problems, pinched nerves, and chronic eye strain well before middle age; when the doctor comments on my shallow breathing despite the physical exercise I do; when I continue to work in poor ergonomic conditions because my only viable and affordable workspace is my own kitchen table, how do I begin to untangle myself from millennia of philosophers and theologians who have, in many ways, caused these issues for me? What if I were to go against the deeply ingrained idea originally set out by Plato of the body as usurper and choose to believe that the body is not "interrupting our attention with all sorts of sensational commotion and diverting our minds" (ibid., 4)? What if, instead of moving towards a Foucauldian maximisation of pleasure and sensation, I turned away from pushing my levels of tolerance so high that I am numb to everything but the utterly sensational, and rather moved towards cultivating both a reflective philosophy and enacted habits that focus on the rich subtleties that the body is able to provide (ibid, 10)? "Ideally," say Helen Wilson and Mark Pearson, "the body, mind, and feelings work in flow together . . . holding back emotions requires muscular tension. When defensive tension becomes chronic it becomes armouring. The incomplete emotional process impacts on cognition, engendering negative and destructive thoughts and attitudes" (Wilson and Pearson, 114). Having studied Reichian theory and gone through a year of therapy firsthand, I find the concept of armouring as originally proposed by Wilhelm Reich perhaps debatable in its details. However, chronic tension, immune deficiency, and a host of other health issues (both physical and mental) can be traced back to chronic tension and the unresolved, often primal emotions that we generally do not take time to analyse or even recognise. Finding philosophical approaches that not only accommodate but require practical, real-world solutions to the roots of our imbalances and necessity for self-care seems mandatory and both dangerous and preposterous to ignore.

This is exactly what Shusterman proposes. Firstly, we need to recognise that we are not brains philosophizing about our brain-boxes. When we speak of phenomenology, we are speaking of consciousness, directed outward from the standpoint of the mind. When we speak of

somaesthetics, we speak of both a living, feeling, sentient body, and its aesthetic uses both in stylising the self and appreciating other selves (Shusterman, 1–2). Should we not “know thyself” through this filter, since it is ultimately embodied experience that forms our entire being and connection to the world (ibid., 3)?

It is also important to recognise that embodied experience is an ongoing process that is constantly unfolding, and to dismiss the body as merely an instrument is to severely impede our understanding beyond a deadened philosophy that does not acknowledge these complexities of time nor matter. Embodiment, states Brian Massumi, is topological, but not plottable. It is incipient. Like an animated Möbius strip, the body is in and around (Massumi, 280). And in and around us are also the potentials for pleasure, something else condemned and taboo for centuries in both religious and philosophical circles. Why are pleasures considered to be alienating from God, or a rabbit hole into which the thinking mind might irredeemably plummet? From the view of somaesthetics, “pleasure should not be condemned as necessarily entailing a retreat into selfish privacy” (Shusterman, 41). After all, it is false to think that these kinds of experiences are alienating because of their privacy. It is a mistake to think of somatic experiences as private at all: “We share our bodies and somatic pleasures as much as we share our minds, and they surely appear as public as our thoughts. Pleasure is misconstrued as intrinsically private by being misidentified as merely an inner bodily sensation to which the individual has unique access” (ibid.). Clearly, if this kind of alienating process were actually true, the more we enjoyed an activity the harder it would be to perform it (ibid.). So, apologies to St. Augustine and his worries about the enjoyment of music tempting him away from God: his experience does not divide or separate him from anyone, including his Creator. The very enjoyment of the sensation relies on the context or activity that shapes its meaning (ibid., 42).

Tracing back to chapter II, in ‘A (Very) Brief History of Yoga’ I had outlined that the movements towards Eastern practices strengthened during the last wave of Baby Boomers. Those embracing movements such as meditation, yoga, and Eastern religion also may have been finding relief in the fundamentals of East Asian philosophy. As religion and philosophy in the past were extremely tightly woven, so too is the body and mind in Eastern philosophy’s tenets. Confucius’ advocacy of daily examining of one’s own person in the quest for self-improvement actually translates to examining the body, since the word person (*shen*) also means body (ibid., 18). Confucius’ logic is that, since without the body we cannot perform any tasks, it is our basic duty and responsibility to care for it thoroughly.

With all of these arguments presented, how do we come to a conclusion and a philosophy that supports a singular mind-body entity as well as supporting our actual physical and mental wellbeing? Through a tripartite system that provides an analytic segment that works toward a theoretical understanding, a pragmatic segment that compares and proposes normative measure, and a third branch entailing practical application, Shusterman fills in the gap that most body philosophy lacks (ibid., 23–29). For the practical application of somaesthetics, the less said the better, since in self-betterment through physical action we are not concerned with textualizing the body (ibid., 29). This is the key advantage of somaesthetics, and it is only advantageous *if* analysis and pragmatism lead, finally, to somatic action as a process striving for betterment or self-actualization.

Äänijooga also endeavours to find an answer to some of the questions I posed throughout this section. In addition, through its planning and execution it fulfils the pragmatic and practical branches of somaesthetics, and through the resultant research it creates analyses and theory that can be used to more intelligently inform further development.

SOUND AND LISTENING

*A tree ascended there. Oh pure transcendence!
Oh Orpheus sings! Oh tall tree in the ear!
And all things hushed. Yet even in that silence
a new beginning, beckoning, change appeared.*

*And where there had been
at most a makeshift hut to receive the music,*

*a shelter nailed up out of their darkest longing,
with an entryway that shuddered in the wind—
you built a temple deep inside their hearing. (Rilke, 83)*

The aspects of sound that constantly surprise, delight, and sometimes frighten me are its inextricability from my body, and its ability to permeate not only ears, but flesh. As a child, this oversensitivity to sound (an ‘all-ears’ feeling) often made me imagine that I could be heard if I was thinking too loudly, or that if I listened carefully enough while lying on the ground I could hear the earth creaking as it rotated in space. This feeling of both intimacy and vulnerability with

the world around me came from our natural perception—namely, that sound happens *inside* us. Certain senses seem to be more readily perceived as happening outside and separate from ourselves: “Sight isolates, whereas sound incorporates; vision is directional, whereas sound is omni-directional. The sense of sight implies exteriority, but sound creates an experience of interiority. I regard an object, but sound approaches me; the eyes reaches, but the ear receives” (Pallasmaa, 49). And it is through this reception, this taking in through the ears, which fire and feed seemingly direct into the brain—our own internal universe—that sound carries such a tremendous potential for introspection and centring:

Anyone who has half-woken up to the sound of a train or an ambulance in a nocturnal city, and through his/her sleep experienced the space of the city with its countless inhabitants scattered within its structures, knows the power of sound over the imagination; the nocturnal sound is a reminder of human solitude and mortality, and it makes one conscious of the entire slumbering city. Anyone who has become entranced by the sound of dripping water in the darkness of a ruin can attest to the extraordinary capacity of the ear to carve a volume into the void of darkness. The space traced by the ear in the darkness becomes a cavity sculpted directly in the interior of the mind. (ibid., 54)

In much the same way as I proposed body philosophy needing to expand to satisfy not only practical applications but also relevant practical applications, so too do I propose that the mainstream views of listening and ways in which we listen need to grow. Says Juhani Pallasmaa in his 2012 book *The Eyes of the Skin*, “It is thought-provoking that the mental loss of the sense of centre in the contemporary world could be attributed, at least in part, to the disappearance of the integrity of the audible world” (ibid., 53). It is this very loss that many of us working the field of sound are now trying to rectify, both in an attempt to connect us to a surrounding environment which lacks our understanding and respect, and as an attempt to heal or better understand ourselves via this aural source that is ever-changing and ever-present. Composers like Murray Schafer, Barry Truax, Hildegard Westerkamp, and Pauline Oliveros were already acknowledging this need as far back as the mid-1970s. Writes Murray Schafer in 1994: “It would seem that the world soundscape has reached an apex of vulgarity in our time, and many experts have predicted universal deafness as the ultimate consequence unless the problem can be brought quickly under control” (Schafer, 19). This kind of extremity is difficult to imagine, perhaps not because it is so far-fetched, but because we are so inundated with noise that we cease to understand its dangerousness. “Noise,” points out Schafer, “was really not born before the 19th century, with the advent of machinery . . . In the pounding atmosphere of great cities as

well as in the formerly silent countryside, machines create today such a large number of varied noises that pure sound, with its littleness and its monotony, now fails to arouse any emotion" (ibid, 393).

There are different methods of dealing with noise, though many of the approaches implemented by municipalities do not encourage anyone to become more aware of how these noises have come to exist or what they mean. Rather, walls are put up around homes near highways and airports, or regulations are enforced in order to stop or limit the noise. Instead of questioning the noise, it is either considered necessary or bad, and is not being examined in a more objective manner. I believe that, much like with revising or coming with new solutions regarding normative ways of dealing with technology and the body, the ways in which we change our relation to noise in our world is most likely to succeed if begun on a local, micro level through awareness exercises. Between guiding soundwalks in my spare time and developing Äänijooga, the hope is that each person who experiences these activities may become slightly more aware of their surroundings each time, and by doing so they little by little begin to make different choices or question what they hear. Changes like these are small, but I believe, significant and lasting. And like Pauline Oliveros' practices, or expressive therapy that utilises an element of sound, I wish to encourage those practicing to find ways of not being passive listeners, but gaining a kind of empowerment through thoughtfully and regularly observing what they hear and reacting to it in a way that they see fit.

One of these approaches of empowerment I speak of comes from Pauline Oliveros' *Sonic Meditations*, in which she describes that "each meditation is a special procedure for the following: actively making sounds, actively imagining sounds, listening to present sounds, and remembering sounds" (Oliveros). In doing this, Oliveros presents a way in which she believes people can heal themselves and each other through common bonds and acceptance, but I believe that practices like this also inevitably help train us to listen in a way that would naturally bring about a better auditory ability. This ability is what Murray Schafer refers to as 'ear cleaning', and similar to Oliveros' tuning in in order to heal ourselves, Schafer wants us to tune in to heal our relationship with our surroundings (Schafer, 20). On many occasions he has suggested "that multitudes of citizens (preferably children) needed to be exposed to ear cleaning exercises in order to improve the sonological competence of total societies, and went on to describe how, if such an aural culture existed, the problem of noise pollution would disappear" (ibid., 21). The problem of noise pollution would perhaps not disappear, but such an increased awareness of it would change the way in which people move about their daily life, namely by attending to our sonic surroundings at a level comparable to that of sight.

Sound, awareness of the body, and space are all factors that are constantly present even if their link is not apparent. If the way one listens deepens significantly (i.e. if one passed hypothetical 'ear cleaning' class), imagine the potential of rediscovering the world as one moves through it. Even the act of walking about within a building could become an intensely rich and interesting experience. Sound is significant in spatial experiences, and though it often goes unnoticed (or unconsciously noticed), it provides the temporal continuum in which other impressions are embedded (Pallasmaa, 53). This is an idea that I will open up further in chapter VII when I discuss various feedback from the Äänijooga sessions.

THE ECOLOGICAL BODY

"But in that last sitting position, she felt part of the situation, held by the rhythms of wind and sea. She felt a sense of her volume, position and her proportion in relation to both the molluscs and the towering cliffs" (Reeve, 33).

As stated, sound, awareness of the body, and space are all inextricably linked. It can be explained in terms of a process, that "we can view cognition not as a representation of the world 'out there', but rather as an ongoing bringing forth of a world through the process of living itself" (Maturana and Varela, 11). In terms of the ear, it is obvious that sound and music are time-based in even their simplest form and are a process as such. In terms of the body, interacting with our surroundings allows something grander to emerge, not as a static entity, but rather as observable dynamics produced by flux (Stern, 26). Nathaniel Stern and Sandra Reeve also propose in their own respective terms that the body itself is never static. Says Stern, "'flesh' can perhaps be thought of as more of a palimpsest, where we inscribe and scratch away, and enfold, alongside our continuous unfolding, in order to not uncover or discover our bodies, but to emerge as bodies (both legible and illegible), as not-yet-bodies, bodies in process—implied bodies, in relation and drawn out" (Stern, 29). In a similar vein, Reeve offers a view that makes the body itself as the process: that even when standing still there is the movement of breathing or circulation, and that like the rest of the natural world, we are constantly transitioning (Reeve, 48). Just like John Cage's revelation when hearing his circulation and nervous system while standing in an anechoic chamber, what these views can teach us is that there is no such thing as a fixed position simply because movement is ever-present (ibid., 48). To shift from Western views of goals and structure to alternative focuses on the liminal or process-based is to redress the balance (ibid, 49).

How sound, movement, the body, and our environment all come together, and how they relate to Äänijooga, is the idea of the ecological body. From a somaesthetic standpoint, one can never be aware of the body alone. "To focus on feeling one's body is to foreground it against its environmental background, which must be somehow felt in order to constitute that experienced background" (Shusterman, 8). Every movement is an interaction: I feel the weight of my body through the gravity exerting its force on me, I feel my breathing through the air that is being taken in and expelled again. "Such lessons," he says, "eventually point toward the vision of an essentially situated, relational, and symbiotic self rather than the traditional concept of an autonomous self grounded in an individual, monadic, indestructible, and unchanging soul" (ibid.). For Sandra Reeve as a dancer and therapist, her notion of the ecological body is that it is engaged in ecological movement: "I am aware of the effect that my movement is having on others and the environment itself, and how they are conditioning my movement" (Reeve, 50). In a very similar vein to Schafer's attempts to bring awareness to the ecological self through listening, she proposes the following:

Finally, by moving in natural environments, ecological movement helps people to expand their embodied awareness to include the broader context from a position of 'being among', rather than 'being central to'. From that position they may experience their own system as an intrinsic part of a wider set of systems and act accordingly, rather than perpetuating an attitude of 'using' the environment. (ibid.)

It is this kind of symbiosis that is crucial to Äänijooga's functioning. Each person involved in a session, whether they be the ones following instruction, the yoga instructor, the sound designer, or the visuals designer, are all reacting to each other, the space, and the risings and fallings of certain subtle entities that result from the sum of all parts. In some cases (as I will outline later in chapter VI), even some of my patches are built in a way that sounds within the space and/or the most resonant frequencies of the space itself are incorporated into the process.

The idea of feedback loops have been important to the building of these patches, but an entire Äänijooga session is in and of itself many different types of feedback loops: space reacts to sound, sound reacts to space; each participant reacts to other participants; the visuals react to sound, the sound feeds from the visuals; each person involved takes in sound, sight, and spatiality, and moves accordingly, affecting the ways in which sound is produced in the space. By the environment noticeably changing, by Reeta allowing spaces to emerge or retract based on the sounds, and by the reactions and resulting sounds of the participants, the ecology and

interactivity is magnified. “Body and environment,” Reeve suggests, “co-create each other through mutual influence and interactional shaping . . . The ecological body is situated in movement itself as a system dancing within systems, rather than as an isolated unit” (ibid, 48). This is the very essence of the behaviour of Äänijooga. To experience the body as part of an unceasingly transitional and transformational environment is to participate in the movement of life.

GESTURE

“This is the pre-verbal language that linguists call mentalese. Hardly a language, more a matrix of shifting patterns, consolidating and compressing meaning in fractions of a second, and blending it inseparably with its distinctive emotional hue, which itself is rather like a colour” (McEwan, 81).

PHYSICAL GESTURE

In her book *Reinterpreting Gesture as Language*, Nicla Rossini sums up the model of classifying gesture that I will be using to categorise physical gesture, as well as to partially map to sonic gesture. The first detailed classification of gestures, she states, was by David Efron in 1941, and is broken down into these constituent categories:

- Emblems, which are arbitrary and can easily be translated into words
- Ideographs, which express mental paths
- Deictics, which show present objects or people
- Spatial gestures, which express spatial concepts such as size
- Kinetographs, which depict a physical action
- Batons, which express conversational rhythm (Rossini, 20)

In relation to Äänijooga, I want to first state that I do not consider an asana a gesture in and of itself, but rather that some of the asanas contain specific gestures. Additionally, gestures can occur alongside or between asanas without necessarily belonging to them.

Though there is also a great deal of verbal guidance that occurs during an Äänijooga session, the nonverbal gestures that generally take place are emblems, kinetographs, and spatial gestures. To clarify slightly further on the former categorisation, Rossini presents a variant model by

Michael Argyle from 1975, which states that emblems (or as he calls them, ‘conventional gestures’) are “arm and hand movements conveying a culturally shared meaning” (ibid.).

Emblems

Examples of emblematic gestures can happen on two different levels within the context of Äänijooga: firstly, the meaning of the gesture may be shared amongst most Westerners but may contain a very different meaning in another culture (such as a ‘thumbs up’ or ‘okay’ signal, which in our culture are both considered gestures of encouragement, but for Iranians with the former or Italians with the latter would be considered very rude). Secondly, the gesture’s meaning may be shared by those that have a solid grounding in yoga. This could apply to a mudra (see glossary)—for those that do not understand its symbolism would likely apply their own meaning or receive it as a kinetograph, and for those with a shared understanding, would interpret it as its original intended symbol.

Kinetographs

Probably the most common gesture in Äänijooga is the kinetograph, which involves depicting a physical action. A large number of the physical actions during Äänijooga do not contain any further meaning beyond movement for the sake of fulfilling an asana or sequence, and thus do not need further explaining.

Spatial gestures

I would argue that spatial gestures are to a large extent universal, since as physical beings we are all subject to the same physics. These concepts are not difficult to explain, and involve ideas like size, direction, and gravity. These gestures are extremely common when conveying information involving physical activity to one another. During an Äänijooga session, many spatial gestures would be tied into a kinetograph: for example, creating a circular motion with the upper torso while sitting, Reeta would not have to specify verbally, since many participants would automatically mimic the size of her movement, creating larger circles if she did larger circles, and smaller if she made smaller circles.

SONIC GESTURE

In regards to sound, I do not want to focus on defining what a gesture is because it is predominantly spoken about without ever being properly defined, and many existing definitions

of musical gesture contradict each other. Additionally, many definitions would necessitate further definitions and explanations that fall outside the scope of relevant topics. However, I do want to state that much like physical gesture, musical or sonic gesture can happen in many different ways, and the easiest components to understand are ones that we can map in the physical world. Some may contain very specific cultural references known only to those who are insiders (much like the emblematic gestures attributed to Efron). Many may be the same type but manifest in different ways, as in the case of representing direction as a low pitch to high pitch/left to right mapping versus a high pitch to low pitch/left to right mapping; spatiality may be near universal in physical terms, but since music itself can contain directional mappings but not direction itself, these may vary from culture to culture. A gesture may be comprised of many attributes such as amplitude, texture, timbre (sound colour), direction, moving, pacing, etc., or it may only contain a couple of these attributes. In the following section, I bypass the issues of contextual ambiguity and look only at factors that can apply both to sonic gesture and physical gesture.

FOUR ASPECTS OF GESTURE AND SOUND

In my own practice-based research, I wanted to begin from a very simple place of building commonality between yogic and sonic elements of Äänijooga. During my time in Marianne Decoster-Taivalkoski's course (Exploratorium of Physical and Sonic Gestuality), I spent many months thinking about different ways of breaking down gesture into different kinds of categorisation. At first this task felt quite daunting, but after beginning to think solely in terms of yoga and sound, the limitations produced an idea of how these two most strongly intersect with each other. The four categories I have ended up with are direction and spatiality, intensity, pace, and sequence.

Direction and spatiality

Even though directional mapping may not correspond in every culture's music (i.e. left may indicate low pitch, or left may indicate high pitch), physical ideas of spatiality are always present in various ways. Likewise, views of how our body relates to direction may change from culture to culture, but we always use some kind of reference to determine how our body fits into space. In relation to Efron's categorisations, these kinds of sonic gestures need no further explanation: big/small, left/right, heavy/light.

I have sonically mapped direction and spatiality onto physical movement predominantly by panning the sound in certain ways. Moving the sound around the entire space in a circular motion while participants are doing a circular motion with their head and torso while sitting is an attempt to produce a tight correlation, since most participants will move at the same speed as the instructor. Using louder amplitudes or adding another layer of texture to a sound as participants 'grow' a sequence by using larger and larger movements is also another example of how I might map direction and space.

Intensity

Intensity in a yoga asana or sequence is predominantly a muscular relation: if a pose requires a lot of balance, uses a large percentage of the body's weight against a small proportion of activated muscles, or uses many muscles to achieve the pose's desired expression, the asana will seem more difficult and therefore more intense. Likewise, if the pace increases, a sequence may turn from something somewhat gentle into something that would need a lot of air and strength. I would consider this an increase of intensity as well.

Intensity itself is not a gesture, but many gestures (in terms of Äänijooga, mainly kinetographs and spatial gestures) naturally desire to increase in intensity if the sound also reflects this change.

Sonically, intensity can be mapped in a few different ways: through amplitude, texture, timbre, pace, or direction. This particular mapping is perhaps the most flexible out of the four I have mentioned, since intensity itself is not an element, but rather the measurable amount of another element. I tend to use an increase of texture through layering as the most reliable means of increasing intensity (though this is simply a subjective choice), predominantly because a multiplying of sonic elements not only increases amplitude in my patches, but also creates more sonic activity. I do not push this element too far, as it is important not to overload or disturb participants when they are already performing a physically demanding task, but the increase is done in such a way as to have consonance with the actions being performed.

Pace

I am using the term 'pace' here rather than tempo: though both can be used to describe the speed at which music moves, tempo is much more exact (say, 72–76 bpm). Additionally, pace can describe both the physical gesture of the yoga sequence or asana in correspondence with the speed of a sonic sequence or motion. Since the sounds I choose for Äänijooga sessions don't

follow a time signature or intentional set bpm but do contain segments that are fast or slow in relation to each other, we will refer to general speed as pace.

In physical terms, pacing creates or diminishes intensity by being faster or slower. Longer-held asanas that are focussed on stillness and calmness (like savasana, 'corpse pose') are reserved for the beginning and end of a yoga session. In musical terms, most yoga routines are strikingly similar to an arch-form or sonata form piece, reserving slow-paced asanas and sequences for the beginning and end, and containing a middle section that will have several increasingly intense, active, or faster bursts. I always keep this in mind and actually study the rough form of Reeta's routine before we hold each Äänijooga session. This helps me to prepare how I will choose an appropriate pace.

Sequence

A sequence is both a yoga term and musical term, and in broadest terms simply refers to any group of movement, sounds, etc., that follow each other in a particular order.

In the case of Äänijooga, this element is likely the most difficult to direct on its own from the sound perspective, and rather follows or mirrors a sequence of yoga asanas. A sonic sequence helps to reinforce the repetition of a particular set of poses, and is done with the intention of helping participants to remember the proper order of the poses within their sequence. I usually choose to build sonic sequences in a very subtle manner, since the sounds I use are not so quickly adjustable, and shifting them drastically to mirror the asanas would be sudden and jarring. Instead, I will often use direction if the sequence contains any left-right body mapping, alter the timbre (tone colour), and bring in/fade out extra layers of sounds during sequences in order to create a greater rhythm.

By breaking down what happens in an Äänijooga session into a set of six simple concepts (emblem, kinetograph, spatial and directional gesture, pacing, intensity, and sequence), the movements or mappings and approaches become very methodical, clear, and easy to work with.

SUMMARY AND PRACTICAL APPLICATION

Through approaching Äänijooga as a necessary third-branch, practical application of the philosophical framework of somaesthetics, I am creating a practice that encourages thought

systems based on the recognition of the mind and the body as a singular entity. Both listening practices and Yoga (and the majority of its modern derivations) already contain a strong mind-body unification, as well as an inherent recognition of the self as part of a greater system that both permeates and is permeable, whether it be in the social, ecological, or spiritual sense.

Through designing sound environments that have the ability to reflect and support the physical behaviour of bodily movements (asanas) by taking into account emblems, kinetographs, spatial gestures, pacing, intensity, and sequence, I am working to increase an Äänijooga participant's opportunities to experience and learn on a holistic level as effectively as possible.



Figure 6. Dancing warrior II

VI. PRACTICAL MATTERS

In this chapter, I will briefly describe each space in which an Äänijooga event has taken place. This is in order to help the reader better understand the physical context of each session. I will also outline my approach to the technical setup, patch design, and sound choices, as well as describing elements such as visual setup and other crucial factors.

EVENT SPACES AND SETUP

Each space that has housed an Äänijooga event has required special thought: each is made of unique materials, shaped individually, and has a different response to sounds created inside it. Though my acoustic knowledge only extends as far as my firsthand experience of working with delay, reverb, and the ins and outs of speaker setup, I did my best to take special care in the planning of many aspects to best reflect the space and context in which each event has occurred.

Arkadia International Bookshop

The first Äänijooga event was held at Arkadia International Bookshop on October 18th, 2015. Arkadia was an ideal premiere event space, since I had played there before both with Petteri Mäkinen and multiple times with Tuomas Ahva as part of our Haruspex project. The room itself held 13 Äänijooga participants, and though full, was not overcrowded. The atmosphere of this particular basement room has always struck me as warm, since the floor is wooden and the walls are brick. It is clean but has a sense of history, and so I felt invited to do nearly anything within its walls, so long as the sounds were also clean, pretty, and intimate sounding. Since the space is open and fairly square, I had a simple 4-speaker setup, with each speaker placed on the floor in each corner, creating both an atmosphere and a pleasant resonance in the floorboards when participants were in sitting or lying asanas. We had participants closest to the speakers simply avoid lying with their heads next to a speaker to avoid unpleasant sensations or an experience of hearing only that one speaker. Reeta was positioned in the middle of room so she could move freely and give guidance when necessary, both verbally and physically. The visuals were also clean, intimate, and delicate: I had manipulated time-lapse frost videos into a soft white orb that fluttered, grew, and disappeared over the hour-long session. This was

projected onto one full wall of the space. Overall the setup was ideal, and this room was easy to create a strong atmosphere in.

Vapaan Taiteen Tila

The second event was held at Vapaan Taiteen Tila on November 18th, 2015. The entire repurposed bomb shelter measure 70 metres in length and 8–9 metres in width, and is both a lovely space and a difficult one to work with. The walls are not flat, but rather an undulating cement stucco covering rock, and can reflect certain sounds in undesirable ways. The length versus the width of the space can be very problematic, and the space's reverb makes adding effects to sound samples often either redundant or distorted. The look and sound of the empty space itself is something I felt intensely drawn to during my first visit, and felt that creating an event here was something I very much wanted to do. The texture of the walls and the darkness and length of Vapaan Taiteen Tila strongly make one imagine that they are deep in an underground cavern, and I wanted to use this already mysterious feeling to my advantage. Through using coloured lights, one very large projection of a constantly shifting kaleidoscopic image resembling a mandala (created by Antti Hietaniemi), and white spot-lighting down the remainder of the space, the atmosphere felt wonderfully unreal and helped set the mood even before I began playing. The main difficulty was that my 4-speaker setup was not able to be placed in a way as to avoid strange reflections and separate each speakers' sonic territory. This made moving sounds spatially along with the yoga sequences very problematic, and during the event I was rendered a bit helpless as to how to adjust both patch and sounds to better suit the space. My best answer was to simply work with layering, textural intensity, and keep most sounds stationary in one speaker for long periods of time. The result was a visually pleasing atmosphere and a soundscape that had suitable character, but the movement of the sounds was lost and therefore ended up coming across, I feel, as less dynamic than they could have been.

Lapinlahden Sairaala (Lapinlahden Lähde)

Lapinlahden hospital, shut down in 2008 and now reopened for community events, was where the third Äänijooga gathering took place on February 27th, 2016. We spent much time measuring, planning, and designing an event that would honour such an historical and peaceful space. The hallway used for the event proved to be a very awkward one to navigate sonically, since the only area large enough to fit a suitable amount of participants was the corridor of the men's ward. This corridor was 3 metres wide, 40 metres long, and in middle of the hallway's length contained an alcove approximately 4 by 10 metres. Though awkward for speaker placement, the final result was a setup that afforded long sweeps of spatialised sound and a

very ideal ability to hear everything from where I was sitting. The setup consisted of 8 speakers: 2 on the far ends of the hallway to transmit Reeta's voice via wireless microphone, 5 speakers places zigzag down the entire length of the hall, and 1 speaker placed in the back of the alcove that filled in the sonic gap between the 2 nearest hallway speakers. The only issue to speak of was a power failure of one of speakers diffusing Reeta's instruction—during testing no such thing happened, but I half-expected technical issues due to the old wiring in the building and improper grounding in certain electrical outlets. Since the hallway was too narrow to afford Reeta much movement during instruction, we had her guide everyone from a place facing the alcove, so that whether participants we facing her on either length of the hallway, or stationed in the alcove, they could always see her and each other for visual guidance. The visual setup consisted of 5 projectors: one projected on the wall above Reeta, 2 projected on that same wall further down the hallway on either side, and 2 projected opposite in the hallway, forming a similar zigzag to the speaker placement. The visuals created were soft, undulating lights that were often reminiscent of the Aurora Borealis, and were created by Antti to match the washy, atmospheric soundscape I had chosen for this event.

Oranssi

The fourth Äänijooga event took place on April 3rd, 2016, in a community space in Suvilahti called Oranssi. Since the building is used on an almost daily basis for flea markets, noise and punk concerts, and political knitting nights (and is absolutely covered in graffiti), the decision was made to hold a spring event that would be slightly more casual, small, and fun. The room itself contains stage platforms used for concerts, random furniture, paintings on the wall, and all kinds of moveable items. Needless to say setting up the space for the event was a fun and creative experience. The speaker arrangement consisted of a basic square-shaped quadraphonic setup. Antti created visuals that were vivid colours and swirling shapes to suit the retro synthesizers and sitar samples I had chosen. We projected these images onto the curtains and over the wall paintings. Extra coloured lighting was used to created areas in which people would be able to more readily see Reeta and each other, and to give extra visual effect. The space itself was easy to manage sonically, and felt intimate and fun.

PATCHES AND SOUND SELECTIONS

Each patch created for Äänijooga's 4 sessions was built specifically for one and only one event, even though modules I had built for one patch may have been utilised multiple times. This was to refine the gestural process from event to event, but also to give a slightly different experience

for each new session. All patches were built using MAX 6, and all sound samples are either from my own collection of sound recordings, or taken from free and public domain sites. Any sound-specific terminology mentioned in this section such as granular synthesis, effects, etc., is more clearly explained in the glossary.

PATCH #1: ARKADIA AND VAPAAAN TAITEEN TILA

This patch consisted of the following components: 16 looped buffers with applied effects, 2 granular synthesis modules with various applied filters, 4-channel panning, the ability to record and create external sound files from each of the 4 channels, and the ability to record a sound file from either the laptop's microphone or an external microphone.

Looped buffers:

Each instantiation of the looped buffer included volume control, playback speed control from 2 (double) to -2 (double and reversed), the ability to select which portion of the sound sample in the buffer should be played back, and the ability to send the playback signal to one of the four following effects: reverb, ring modulation, chorus, and delay. Each of these buffers also had a simple panning control capable of sending the output signal to one of the four audio outputs (and thus one of the four speakers).

Granular synthesis module:

The most basic element of the granular synthesis module I had built previously in a workshop with Robin Menard in 2014. This particular granular synthesis patch was simple but functional: a buffer with controls determining the size of the sound grain, the slope, the rate in which a new grain would be selected, the range of pitch of the selected grains, and the amplitude range. It also included the ability to play multiple streams of grains simultaneously, thus creating a fuller sound.

I elaborated on the 2014 patch by creating a module consisting of 2 instantiations which, when turned on, would scroll through the sound sample at a rate of 1 audio frame per 16 milliseconds. The window of time from which the grains were selected was 50 milliseconds. Because of this very short time selection window, the sound produced was quite consistent and smooth, creating a pleasant, atmospheric texture out of almost any sound sample used.

Additionally, a selection of filters added to the signal (high pass, low pass, bandpass, band stop, peak notch, low shelf, high shelf, and resonant) could shape the sound by either reducing unwanted frequencies or boosting particular frequencies to create a more tonal atmosphere for listeners. Each of the 2 granular synthesis instantiations also had the capability of 4-channel panning, as well reverb settings.

Effects:

The effects used in this patch were borrowed from the UBC Toolbox, a set of modules created by Keith Hamel and Robert Pritchard at the University of British Columbia. The effects modules consisted of a simple ring modulator, chorus, reverb unit, and delay unit. Though external plugins may have been a more convincing-sounding option (particularly with the reverb unit), these were suitable enough as they did not take up too much CPU usage, had all the necessary parameters I needed, and also allowed for presets to be easily programmed into them.

PATCH #2: LAPINLAHDEN SAIRAALA

The patch for the Äänijooga event at Lapinlahden hospital contained 8 looped buffers, 8 sine waves, one modified granular synthesis module, an 8-channel panning module, and the ability to record from an external microphone. No effects modules were used in this patch.

Looped buffers:

These buffers were built in exactly the same way as the previous patch. Rather than having the signal send to an effect unit, the signal was sent to a filter (high pass, low pass, etc.) identical to that of the granular synthesis modules from the previous patch.

Sine waves:

These sine tones I left pure, simply because the sound produced by additive or subtractive synthesis was a bit too much in addition to other sounds. Each buffer signal was sent to 'fiddle', an object in MAX that determines the pitch of an audio signal. The determined pitch value was then used to create a pure sine tone that would reinforce the most prominent pitch of the sound sample used in the buffer

Modified granular synthesis module:

Rather than using a module that scrolled, I had been playing with the idea of a module that would select a short window of frames and then 'freeze' them indefinitely. I got this idea from

the Michael Norris stochastic spectral freezing plugin, one of the many of his I often use for manipulating sound samples into more abstract forms. I had wanted to try using this live and was able to built one version for the patch, but found a simpler and more pleasing-sounding version built by Jean-Francois Charles. The module functions by taking an audio snapshot, saving the frames to a matrix, and then randomly playing back audio frames from the saved matrix, thus 'freezing' the sound.

The module holds 2 sound snapshots simultaneously. When triggered, the new sound fades in and the previous one fades out. Parameters for the duration of these fade-ins and fade-outs are adjustable.

The signal from this module is sent to a recorder that records and creates that recording as an external file.

Panning module:

I began the first version of the patch with a self-made panning module based on the previous patch, but after testing it concluded that the UBC Toolbox's 8-channel panning module was far superior in controllability. Using this module even accommodated the need for speaker delays (necessary for this patch because of the large space). The panning module allowed for a great amount of sensitivity in terms of volume, and allowed me to see at a glance where in the space each of the 8 samples was currently positioned.

PATCH #3: ORANSSI

This particular patch was based largely off of the previous Lapinlahden patch described above. The patch contained 12 looped buffers, 12 filter modules applied to each buffer, 12 sine waves directly linked to the most prominent pitch of each buffer, the previously-built spectral freezing module (granular synthesis module), 4-channel panning capability for each of the 12 buffers, and the ability to record from an external microphone. Reverb modules were applied to 4 of the buffers to smooth out the ends and beginnings of particular samples used during this event.

The looped buffers, sine waves, and modified granular synthesis were identical to that of the previous patch, as well as the recording capabilities. The main differences was the panning: I altered the patch so that each of the 12 channels was able to be sent to any or all of the 4 speakers used in the event. Like the previous 8-channel module, this 4-channel module made seeing the placement of each sample quick and easy.

SOUNDS AND TREATMENT

ARKADIA

For this session I chose 30 sound samples in total, consisting largely of metallic musical instruments. For atmospheric background I also included a manipulated, many-layered sample of myself singing, a small banjo sample, as well as a couple of spacious-sounding field recordings I had made in the dome at the top of Teufelsberg (located in Berlin).

The metallic instruments were comprised of bells, chimes, singing bowls, and self-made recordings of gamelan instruments. These chosen sounds may be considered on the typical side of what one might expect to hear at a yoga session, but I suspect that the nature of these sounds is very befitting for relaxing because of their timbre. Part of the appeal was also the fact that these samples, even if manipulated, might still appear familiar and therefore welcoming to Äänijooga participants.

Many of the soundscapes were treated in a compositional way: a new sequence would trigger a shift to a new atmosphere, though I would keep certain sound samples as a base to avoid too much change in too little time. Panning was used frequently to create activity, and effects were largely used for altering the texture when more intensity was called for.

VAPAAAN TAITEEN TILA

The sounds I selected for this event consisted of 16 samples: 2 samples of water dripping (with added reverb to evoke a cavern-like effect), a sound sample of a metal bowl of water being lightly struck with a mallet, 7 drone samples (derived from different sources and manipulated quite heavily with Michael Norris' effects such as Dronemaker), a synthesized harp sample, a glass bowl sample, and a recording of a waterphone. Reeta and I had decided that a coherent element between the sounds and the yoga sequences would be based around water (the element of winter), so in the process of manipulating the drone samples I concentrated on drawing out low frequencies to give the effect of being underwater.

Though it was difficult for me to hear the spatialisation from where I was sitting, movement was a very crucial part of my treatment of the sounds during this event. The water samples were

positioned to the left and right of the participants, and were kept stationary almost the entire session. The remainder of the samples were layered heavily to create a blurred but constantly shifting soundscape.

LAPINLAHDEN SAIRAALA

I only used one pre-recorded sample for this event, which was a swiss bell. The remainder of the sounds came entirely from the space itself (and whatever sounds Reeta and the participants were contributing with their voices or movement).

Since participants from the previous two sessions had all given very pleasant feedback about the sound samples and their behaviour, it felt befitting to try something different that would perhaps be a little less familiar to those not trained in sound and push the audience's threshold a bit.

Lapinlahden Sairaala is a beautiful, airy space with a lot of historical interest attached to it, so I wanted to create a patch that would take its sounds from the space itself. I derived a way to do this from Alvin Lucier's process-based piece entitled *I am Sitting in a Room*, which uses the resonant frequencies of the specific space in which the piece is being performed. The text goes as follows:

I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the resonant frequencies of the room reinforce themselves so that any semblance of my speech, with perhaps the exception of rhythm, is destroyed. What you will hear, then, are the natural resonant frequencies of the room articulated by speech. I regard this activity not so much as a demonstration of a physical fact, but more as a way to smooth out any irregularities my speech might have. (Lucier)

However, rather than using speech as a beginning point, and rather than following through with the process until the resonant frequencies of the space were overwhelming, I merely chose to use this process until there were evident frequencies and then shape them with filters until I got the sound I felt was appropriate.

ORANSSI

For this particular event, I wanted to be playful by using material that had an allusion to psychedelic, hippie clichés in subtle ways. The sound collection consisted of manipulated sitar samples, a couple of deep pitched gongs, one small pitched gong, airy voice samples, and a few long arpeggiated synthesizer melodies. I also recorded sounds from the space via the spectral freezing module and played them back into the room to add fullness to the sonic foundation. The material generally contained a lot more activity in its original state than the other sound collections, though I compensated during more static points in the yoga asanas by either blurring this sonic activity with reverb. I also balanced it with the fact that all of the sounds had been chosen or manipulated to fit into the key of F major (creating pleasant harmonies and a kind of consistency no matter which samples I chose).

Since the space was small the volume, spatialisation, and blending of samples were very easy for me to hear in any part of the room. Additionally, since Reeta and I had by now practiced quite a bit together, I was able to strongly support the sequences with spatialisation, layering, and volume swells to create stronger moments of movement. I felt that I was able to do this more successfully than in previous sessions. As with every other event, I ended our time with one single bell-like sound (using the small gong sample). Throughout my practice I have always ended by fading every sound out slowly enough that people's listening becomes very sensitive. It is by doing this that the sounds still seem to be heard even after the volume has been turned all the way down. I always leave this singular gong or bell sample to loop even after the last person has left their mat, because it is important to me that their emergence from these somewhat unreal spaces feels gradual and transitional.



Figure 7. Moving through sound

VII. ÄÄNIJOOGA IN THE MOMENT

This section includes excerpts of six qualitative interviews I conducted with various participants who had been present at 3 of the 4 Äänijooga sessions outlined in this thesis. The participants chosen were deliberately of different levels and backgrounds, both in musical and physical training such as dance or yoga, in order to reflect as broad an opinion as possible. I provided them with a set of 9 to 11 questions based on their background, and though I guided the interviews fairly strictly in order to prevent interviewees from having to repeat themselves too frequently, I also allowed some extra time to discuss points that perhaps could have revealed something that, as the artist and designer, I may have been completely unaware of.

The questionnaire consisted of 11 questions that all attempt to provide information regarding my research questions (1. Can yoga and sound be used together in a way that is more beneficial than the sum of its parts? 2. Can yoga and sound be used together in a way that is more interesting or beneficial than the current alternatives?). The questions were as follows:

1. Describe your background both with your musical training and with yoga training.
2. Describe your overall experience with this particular event, and if there were any particular details that stood out in your mind.
3. Describe your experience of the sonic environment you heard.
4. Did the sound environment affect the ways in which you moved? If yes, describe how.
5. Describe your experience of the yoga we practiced during this event.
6. Did the asanas or sequences affect the way in which you listened to the sounds? If yes, describe how.
(7 & 8 for those with yoga training)
7. In your past yoga training, can you describe any experiences where yoga classes have included sound or music?
8. Did the sounds/music in this Äänijooga event affect you or seem different in any way than these other experiences you described? If yes, how did it differ?
(9 & 10 for those with musical training)
9. Can you describe any experiences where you performed or studied an activity that included both sound/music and movement (dancing, soundwalking, etc.)?
10. How does your Äänijooga experience relate to these other experience?
11. Is there anything else you'd like to add as a final note?

FEEDBACK FROM THE EVENTS

ISKANDER BEKEN

Iskander has neither music nor yoga experience, nor had he ever heard of practices combining yoga and sound before attending Äänijooga. He stated that he agrees with the view that all life is yoga and proposed that his work as a biologist could be considered “some twisted form of *Jnana* yoga” (the path of knowledge) (Beken). Iskander participated in the Äänijooga event that took place at Lapinlahden Sairaala.

For Iskander, the most memorable detail was at the end of the event: everyone was lying in *savasana* (corpse pose, lying on the back and relaxed), and Reeta came to each participant and placed a small, smooth stone on their forehead. “This created some intimate connection between us,” said Iskander, “because we looked each other in the eyes and appreciated each other—this is quite rare in the everyday life. This created (a) warm feeling of love and trust, and I still keep this stone with me” (ibid.). The overall experience was very pleasant, and in a word, quieting. “All details were relaxing and in harmony with each other: the sounds, colours, voice of the instructor, and the asanas. In my view, they nicely complemented each other to create this truly unique experience. For me it was very easy to relax and to dive into this joint experience that we were having” (ibid.). What really deepened the experience for him was the ability to feel the collective energy that was shared by having this experience with others (ibid.). It seems that this feeling of connection was satisfying and important to his overall Äänijooga experience.

He brought up the point that, as a beginner, the surrounding sound may indeed be very crucial (ibid.). However, as I found with many of the other participants, Iskander did not consciously focus on the sounds much, nor could he recall much detail (ibid.). He said of the sounds, “they were not seizing too much of my attention, which I liked” (ibid.). He also explained that he came into the session with an Alan Watts/John Cage approach of listening: to merely let the sounds move past, not to name, categorise, nor judge them (ibid.). He also pointed out that since silence is quite unusual in our culture, having a balance of sounds and colours (i.e. the projected visuals) that were stimulating but unobtrusive can make people feel calmer (ibid.).

Regarding the relation of movement and sound, Iskander was not sure how the movement affected his listening ability, but he was certain that a quiet and calm sound environment caused him to move in a more slow and relaxed manner, as opposed to his normally sharp movements (due to engaging in high-speed sports) (ibid.). During more static portions of the yoga movements, he said he was able to dive back into the sound environment (ibid.).

PETTERI MÄKINIEMI

Petteri's background involves quite a lot of music, having played guitar for over 15 years and building his own synthesizers and instruments, such as his Ondes Martenot-inspired *Ginette*. He is a fellow Sound in New Media student, and we make music together on occasion. He has had some experience with physical activities such as dance and pilates, but until coming to Äänijooga at Lapinlahden hospital, had never done yoga before.

Because of the newness of the experience, he stated that most of his focus was placed on following the verbal instructions and trying to understand the sequences of asanas. He did eventually get the flow, but as a first-time yoga participant it is understandable that most of his attention would have been on the movement.

Regarding the sound, Petteri found a lot to enjoy but spent time trying to figure out how the sounds used in Lapinlahden hospital were derived from the space. "Maybe that wasn't so clear, and [I] was concentrating very hard on the movements, so I wasn't listening very much to the sounds" (Mäkinen). He did, however, note how the sound of the space grew around him and found it a pleasant surprise. He said, "I liked how the whole event started...in the beginning there wasn't any audio, like being in a normal yoga class, and then...it came gradually around. Almost like falling asleep" (ibid.). The spatialisation also caught his attention (ibid.).

Petteri noted that performing physical activity often creates a phenomenon when listening to music, a point which might very well apply to other participants: in his previous experience with Lindy Hop classes, he was never conscious of the music beyond using it for its rhythmic guidance, but afterwards would catch himself humming the music (ibid.). For Petteri, what was most memorable was the feeling that the sound induced, and posited it was possible that the sounds calmed the way he moved (ibid.). The environment, he described, was really calming and relaxing, enough that he felt able to relinquish his concentration (ibid.). It was this calming and meditative sense that he claimed was the sound's function in Äänijooga (ibid.).

The yoga aspect was appealing to Petteri for its meditative aspect, and his overall thoughts were that it was a pleasant first experience for him.

ELISA SUOKKO

Elisa considers herself to be both an amateur in yoga and music, having played piano until 14 and practicing yoga on and off. She described her yoga practice as being more regular in the last six months, doing it 1–2 times per week. Her experience with yoga has been predominantly with the styles incorporated into Äänijooga. She participated in Lapinlahden Sairaala Äänijooga.

Her experience, she expressed, involved feelings of presence. This came from the fact that she was familiar with the space, but also found herself affected by the sound environment in a way that was different than other yoga-with-music classes she had attended (Suokko). “When I was actually thinking that the sounds were from the space (as in derived), I became more aware...that it’s not just the room, but thinking about the whole building somehow being present. Not just about the people being in the space, but that the space was somehow aware of the people” (ibid.). She added, “It was a nice thought, especially because I’m not always that present. I tend to be in my head or focussed on the people I’m with, and ignoring the spaces” (ibid.).

Regarding the effect the sounds had on her, she said, “The sound made me focus more. I wasn’t thinking about it at the time, but yeah...you can’t move against the sounds, you can only move with them. And that element is there even more than the teacher giving instructions” (ibid.).

Perhaps the most insightful part of my interview with Elisa was when I asked her to compare her Äänijooga experience with her regular yoga classes. She said the following:

The place that I often go to has background sounds, like indie style. I think this is a very fundamental difference there, because the Äänijooga sounds make you focus more...it made me focus very much on the situation in itself, kind of...just very much being in the moment. Whereas the other thing is a radio background kind of thingie, and if I find myself listening to the songs, I’m like, *Okay, my mind is wandering, but not in a good way*. I think there was much more presence in Äänijooga. The difference is probably because the other is just like a mix of songs, and maybe there is a kind of mood, but the songs aren’t meant to be part of the class. It’s like a blanket that just makes the room feel more...so it’s maybe like an accessory. It’s somehow much more distant whereas in Äänijooga the sound is...*there*. (ibid.)

JANI HIETANEN

Jani Hietanen is a fellow Sound in New Media student, and though he claims to have no formal music training he has studied music theory, played guitar actively for 25 years, and has a background in film sound. In regards to yoga, he has studied on and off and had a one year-period where he was going to Hatha classes regularly. He said that the sacrifices in time and lifestyle prevented him from pursuing it further. Jani was present at both the Äänijooga events at Arkadia and Vapaan Taiteen Tila.

The main technical points Jani brought up confirmed my own feelings that had caused some troubles during the event at Vapaan Taiteen Tila: namely, that the spatialisation effects I was using were not wholly effective due to the layout and walls of the space. He also mentioned that the speaker placement would have been better had it been placed higher (to mitigate some of the spatialisation issues), something I too noticed but didn't have the resources at the time to execute (Hietanen).

Jani was able to connect readily to many aesthetic features, including the 'beating' effect I was using by playing two closely-pitched tones. "I found it really easy to connect to emotionally and just kind of sink into the sound. I found it helped me, to kind of concentrate while doing the yoga also...I tend to lose myself into the sound. Or it helps me relax, I think" (ibid.).

Jani couldn't remember a lot of detail as to how he had felt physically or mentally during much of the Äänijooga sessions (since months had passed between said events and our interview). However, I asked him to describe a past experience of listening to similar soundscapes while doing yoga at home, and if he thought he moved or listened differently while doing so. His response was the following: "Yeah, definitely I do. Probably it affects the length of the poses...and the flow of the movement. I usually can't help but move along to whatever music I hear. It gets into my body always, so it kind of...it gets a bit more fluid. Yeah, so definitely it helps" (ibid.). When asked to compare this experience with other sound/yoga experiences, he said: "we used to do this spiral meditation . . . they had a, to me, really aggressive kind of techno playing along, and it was really disturbing. I could never really get into it. The sounds were surprisingly harsh, and at that point in my I wasn't at all into that kind of music. I don't know, I just didn't connect at all. I couldn't relax under that really fast tempo" (ibid.).

SATU JÄNTTI

Satu works as a volunteer for Lapinlahden Lähde, and therefore has a chance to participate in many of their events. She is finishing her Master's in nursing, and she supports a healthy skepticism towards certain aspects of Western medicine and finding integrative and alternative methods to incorporate in her own work. She was particularly excited about this event due to her interest in sound healing. Her yoga experience began in the 90s and has continued to this day. Satu has a love for singing, but no formal training in music.

Her first statements of the interview were, "I really enjoyed it. The space was very good for Äänijooga, so it was nice to have the atmosphere there. I enjoyed the sound very much, because it helped me to get to the feeling of the yoga and the meditative things. And so I was really relaxed when I left there" (Jäntti).

Regarding the sound, she felt that it was very beneficial to the session. "It helped a lot," she said, "because if there hadn't been sound and the colours (referring to the projected live visuals) it would have been a completely different experience. I've done a lot of yoga, and it was a really different experience" (ibid.). She added, "Maybe I was concentrating mostly on what the instructor said, and on the colours on the wall, so I don't remember at all what kind of sounds there were. It was meditative, but I don't have any memory of it—I think I went so deep into it that my concentration was on other things. It was just there in the background, but I really got a relaxed feeling, so I think it worked!" (ibid.). She also described that the sounds "deepened the experience a lot. It also made me forget the other people somehow, so I only paid attention to what I was doing. I didn't watch anyone else, even if I couldn't hear the instructor, I was just in myself somehow" (ibid.).

In regards to the yoga, she expressed that all these asanas were ones she had done before. "But," she said, "I had some new experiences with this class...it wasn't a typical class for me. The structure of the class was different...it was something totally new" (ibid.).

When asked to compare other music/yoga experiences, she said: "I've only attended meditation classes that have included music or these singing bowls. Okay, and there was one class last year where we did yoga at the time as someone was playing, but it didn't go that deep. This Äänijooga went much deeper" (ibid.).

MINNA LYYTINEN

Minna has a basic musical understanding, having played piano for 9 years and sung in musicals and improv theatre. She had tried yoga occasionally throughout the last 10 years, and in the last year has been doing it weekly. Minna has had much experience concerning movement and the music—she has studied dance consistently throughout her life, predominantly ballet and contemporary dance. She was in attendance at both the Arkadia and Vapaan Taiteen Tila events.

Minna explained from many different angles why this particular experience felt different from other times she has experienced music in yoga classes. Tying in with her thoughts about the space, she attributed feeling much more aware of the space for the entire session to the sound environment. “The sounds really helped me to focus on the movement. When I’m really focussing during savasana, I feel the space in a different way, but there I felt it differently the whole time” (Lyytinen). She also related how her past memories of being in yoga classes with pop music were something she found disturbing because of their disruptive pattern (ibid.). She then related yoga lessons in which Indian music had been played, and described how her unfamiliarity with the music and Indian raga structures had made listening to it while practicing yoga much more natural than the pop. However, she mentioned that the former music style still “takes up space” (ibid.). She said, “What you did, there is somehow more space for having my own moment more. With Äänijooga, it’s environmental, I can’t know what is coming. It’s not something I listen to at home, so I might as well just be present and see where it goes. But I didn’t feel like I somehow had to focus on the sound, even though it was new to me” (ibid.). She spoke of the sonic environment as being *kokonaisvaltainen* (all-encompassing), and explained that even though it filled the space, it did not take up space in a bad way (ibid.).

She also spoke a few times of the sounds feeling natural. Minna was also very certain that the sounds affected her movement. She said, “I’m thinking now of the second session...I don’t remember how Reeta described it, but there was a part that was a little bit like dancing. I don’t remember what kinds of sounds there were, but it somehow...I wouldn’t feel comfortable moving like that without any sound. It really felt like dancing” (ibid.).

And lastly, when I asked her if there was anything further she’d like to add, she stated “It was very difficult to separate the lights and sound and space, especially in the bookstore, and I really liked that feeling. This is in the core of yoga, that everything comes together” (ibid.).

FEEDBACK FROM A YOGI

Reeta Partanen has been with me since the beginning of the development of this practice, and is half of the guiding force that allowed the events to be the unique experience so many participants felt they were. Since a substantial portion of the planning for each event was her doing, it felt important to also give her a voice in this thesis through her feedback of the accumulated Äänijooga events and preparations that we have made together. Many of her opinions are those which I share completely, and many are opinions which could only be expressed from her unique position as Äänijooga's yoga instructor.

"At its best," she says, "a suitable sound environment has the potential to fully support concentration and the practice of yoga, even to take it further and deeper. At its worst, the wrong kind of sounds can make guiding a practice very difficult, as well as create frustration and negative feelings toward the physical practice" (Partanen). Though she has always been drawn toward using sound and music in her classes, this is one reason why she has been cautious about using playlists during the other teaching classes. The other reason is that one of her distinguishing characteristics as a yoga teacher is allowing room for spontaneity during a session (which means that the physical routine may become out of sync with a pre-planned playlist).

Regarding her experience of teaching alongside a spontaneous, flexible sound environment, Reeta says the following:

The possibility to create an aural/visual/physical experience on the spot is something so special that I would love to give every yoga teacher the possibility to experience how it actually feels. In a regular yoga class situation you give your students guidance on how to move and listen (to) their bodies, and if you are lucky the music you have chosen is supporting the asana. In Äänijooga, since the sounds are created both continuously and simultaneously, it is possible for the teacher to create and build up the asana practice spontaneously if the sounds give inspiration for that, and still be confident that all the parts of the practice will be somehow linked with each other. The possibility to cooperate with the sound artist and inspire her work with the movement can also be a very powerful and holistic experience, both physically and emotionally. (ibid.)

She also brings up a point that I highly agree with, and one that I've often experienced when performing noise shows with others: yogi and sound artist can experience a type of dialogue between sound and movement that support each other so strongly that neither one can tell who sparked the change or who is guiding whom (ibid.). This is, I think, an ideal situation that can trigger a whole host of beneficial things to happen during an event—as Iskander Beken pointed out during our interview, he could feel a collective kind of energy that brought him closer to the experience (Beken). Much like performers and audiences at a rock concert can clearly create a feedback loop of energy and approval, so the same can happen for yogi, sound artist, visual artist, and participants.

Reeta does not treat the sound merely as background, and has been very clear at the beginning of each event by explaining how the sounds have been created, or discusses briefly how the two practices interrelate. Says Reeta, “I very much felt that hearing about the background about the sound environment brought more awareness and mindfulness to the presence of the people with us, and also made them feel more unique and special in that particular situation. Knowing that the sound environment is designed only for that one particular event can bring up the feeling of being safe or the feeling of being taken care of in a special way, which can help to relax and listen when working with your own body” (Partanen). I hadn't thought of a feeling of safety until Reeta brought it up, but I wholeheartedly agree that a participant's awareness of the care and effort put into designing the entire experience can very likely have a huge effect on an individual's desire to get the most out of their time in a session, as well as being cared for and welcomed into the process.

In the course of Äänijooga, the most problematic issue for both Reeta and I has been how to incorporate the sound environment with the sound of her spoken voice. With each Äänijooga session we have brought up this issue anew, since each space requires different volume levels, positioning of participants in relation to myself and Reeta, and new adjustments to the way in which sound reverberates or changes within a space. The smaller spaces such as Arkadia and Oranssi proved to be easy to handle without much thought, but the larger spaces (Vapaan Taiteen Tila and Lapinlahden Sairaala) indeed proved a challenge. In Vapaan Taiteen Tila, Reeta was made to speak over 4 full-sized speakers to 50 participants, and even at a low volume it was easy to see how much energy she needed to give in order to keep everyone moving forward. In Lapinlahti, electrical issues with one speaker and a fine balance between the volume of her wireless microphone and the six speakers diffusing the sound environment proved to be rather stressful for me. Aside from the technical issues of volume and space, Reeta mentions that it was also difficult finding the right choice of words, tone of voice, and balance between speaking and silence. “At times I felt that with the wrong words it would be so easy to destroy the unique atmosphere,” she says, though over time her and I have both noticed that we have

come to collectively understand the flow and ebb of when speaking is necessary and when the sound environment can do the guiding (ibid.).

Planning the processes with Reeta has led both of us to understanding what can be prepared or thought of that will not only make the process easier to perform, but more importantly how to create an increasingly pleasant and coherent experience for everyone. Sharing sound samples and making graphic sketches of how the yoga session will roughly look in pacing, position (lying, sitting, standing), and intensity has helped both of us plan a solid but nevertheless flexible session.

Reeta's gift is that of focussing on what can be experienced and achieved with what an individual has through accepting the circumstances, embracing them, and learning from them. Her attitude toward her teaching is nearly identical to that of Sandra Reeve's approach in movement and dance therapy:

My intention is to accept and appreciate what they (the patient) can already do and to help them to clarify their own particular habits, so that they can become aware of how they move (their own unique movement vocabulary). This amplification and definition of their choice of patterns gradually helps people to be bodily aware of how they do, as they are doing it, rather than retrospectively, or not at all—and to cultivate acceptance as the first stage of transformation. (Reeve, 21)

Helen Wilson and Mark Pearson write about successful ET (expressive therapy) in a similar vein:

Rather than aiming for relief of, or diversion from, presenting symptomology, ET increases the ways a counsellor can draw the client's attention to the body's messages. Along with expanding the range of ways they respond to reported somatic symptoms, this focus can lead to assisting a client in, and increasing their skills for, self exploration and achieving emotional and psychological change. (Wilson and Pearson, 91)

This attitude is invaluable, I believe, to creating not only the potential for anyone present to learn and experience something for themselves right away and moment by moment, but also creating a space where even the smallest self-revelation is a celebration. Comfort, acceptance, and safety are the most crucial aspects when offering a space for those to express themselves or allow themselves to be vulnerable to a new kind of mind-body experience. As Reeta so perfectly puts it, "If you get the right kind of feeling by lying down and listening, it is already perfection. If you get the feeling your body wants by listening *and* moving, it is perfect as well" (Partanen).

PERSONAL REFLECTIONS

After looking at the feedback from all six interviews and contemplating what Reeta and I have discussed after each Äänijoga event based on our own experiences, I have come up with the following conclusions, advantages, and disadvantages gained firsthand through this event series.

Firstly, it is obvious that most participants have at the very least enjoyed the experience and found it refreshing. Some of them feel that Äänijooga is unique in what it has done for them. In retrospect, I would have preferred to extend the interviews to a second session where I am able to ask further questions based on their first set of answers; some of the interviewees brought up interesting points but perhaps did not have the vocabulary to explain more about it at the time. I feel that it was my duty as interviewer to ask the right questions, and in some ways was not sure how dig deep enough into each interviewee's experience in order to better understand the consensus of what worked and what didn't. However, from the interviews and speaking with participants after each session, it is apparent that Äänijooga is a new experience for nearly everyone and that, even if some of the benefits are difficult to articulate at this point, people are finding enough stimulation and enjoyment that many are coming back to subsequent sessions to experience it again.

The two main points that the interviews were able to reveal was coherence and depth. Our desire to create a coherent experience where the space, sounds, visuals, and yoga instruction all feel like they belong together has definitely been successful thus far, although Reeta and I are constantly working in new spaces that demand new solutions, and are always wanting to improve this aspect regardless. The second point was that every participant I spoke to in some degree or another has claimed that the soundscape indeed does allow them to focus more deeply. Whether that focus is directed to their bodily movements, to listening to the environment, or to exploring their own thought processes and feeling depends largely on the moment and on the participant, but it is still unanimous. A few have even claimed that they would like to always be able to have this sound environment as part of their yoga practice. This makes me believe that surely there is a lot of promise in the development of this practice.

One other major point which also needs more exploration is the phenomenon that most participants do not remember the sounds, but remember the feeling. Going back to Juhani Pallasmaa's ideas regarding space, sound, and memory, I attribute the participants' lack of memory not as a lack of focus, but actually as the opposite—hearing structures and articulates the experience and understanding of space. "We are not normally aware of the significance of hearing in spatial experience, although sound often provides the temporal continuum in which visual impressions are embedded" (Pallasmaa, 53). Everyone I spoke to had clear memories of either visual experiences or emotional experiences during the event. Each one of them mentioned calmness, relaxation, and/or deep focus during their time in the Äänijooga sessions. This is very much in line with the intentions that I have kept throughout the course of Äänijooga's development thus far: that the sounds used are interesting and stimulating but function as an unobtrusive, experiential environment that can be listened to but does not force itself on the listener. Rather than acting as a sound object needing one's attention, it frames other aspects of the experience and invites the action of listening in a much broader sense of the word.

The main advantage of Äänijooga that has proven itself over and over again for both Reeta and I is the flexibility and spontaneity both of us have built into our practice with each other. The spontaneity from a yoga perspective allows a larger range of exploring one's own body in its highly specific and contextual ways of moving. From a sound perspective, the fluidity of a sonic environment built for this specific purpose and context—as I believe, and as has confirmed by multiple interviewees—is superior to that of any pre-recorded music or soundscape. Furthermore, the behaviour of the environment does not simply mirror the yoga practice, but pulls, flows, and shapes it in its own way. Therefore I do not believe that a class could be taught in the same way without this environment present. As Satu Jäntti had stated in her interview, it was an entirely new experience for her (Jäntti). It is this give and take between yoga and sound during an Äänijooga session that allows unconventional forms, structures and sequences to take place. I believe this is a sign that Äänijooga, if not already its own solid practice, has great potential to become well-developed enough that the yoga taught and sound produced during one of these sessions becomes a genre or an aesthetic entirely its own (and an aesthetic where the components can only serve together in their intended context).

Concerning the aspirations introduced in Chapter I, I now have sufficient information to believe that I have fulfilled these personal goals. Reeta and I have designed four events where spontaneity, fluidity, and an all-levels approach to both the physical and aural elements of the experience has indeed been successful at allowing multiple participants to have a new

experience or insight into their environment or their own self. They have indeed expressed pleasure and interest in the sounds, visuals, movements, and spaces which we have chosen or created for them. And participants have confirmed that, aside from the couple of small technical issues, this practice has generally conveyed itself as a coherent whole to those involved.

The disadvantages of the practice we created lie predominantly in the constantly changing spaces we hold these events in. The ways in which each space holds and reacts to sounds must be taken into account, as well as the visual aesthetics of the space and its history. My knowledge of acoustics is present but not particularly strong, so in a space like Vapaan Taiteen Tila or Lapinlahden hospital (spaces not originally designed to support music performance or speech), it is very difficult to know what the final result will sound like, and if that result will be relaxing or not. One of the fastest ways of alienating an audience is through technical issues, and unfortunately I learned that lesson when one of the eight speakers I was using suddenly dropped power during our Lapinlahden event (despite thorough testing the day before). These things at times cannot be avoided, but the experience is greatly affected. When we are constantly changing spaces, the ideal result is a series that is always exciting, and always providing a new but pleasant environment. In less than ideal situations, however, the challenge of creating a new sonic environment that behaves in a spatially idiomatic way can be a big challenge, and I feel I may not always understand from a technical side exactly what each space demands to create this ubiquitous environment. This does come with practice and time, however, and the challenge of a new space each time provides me with a solid learning curve.

I will now address the research questions posed in Chapter I:

1. Can elements of yoga and sound be utilised together to create a coherent wellbeing form more beneficial than the sum of its parts?

Though Äänijooga has only consisted of four sessions and one prototype session, there is already a lot of evidence to support that the practice has provided a deeper-than-usual experience to those with previous yoga and/or sound practice. Given the interview results, it is perhaps more difficult to say if the amalgamation of sound and yoga elements is particularly beneficial for those without yoga nor musical training since there is nothing for them to compare it to. It has been specifically expressed by both Minna Lyytinen and Satu Jäntti that the practice did indeed present itself as a coherent whole, and that these elements to them felt harmonious, and in Minna's case, inextricable from each other (Lyytinen; Jäntti). Though it is expected that not every single participant will connect so deeply to the practice, the twofold approach to wellbeing

by providing elements of listening and elements of controlled movement undoubtedly increase the chances of experiencing more benefits than one practice or the other.

2. Can elements of yoga and sound be utilised together to create a wellbeing form more beneficial than similar alternatives (i.e. yoga with live musician, pre-recorded tape, etc.)?

I believe that, perhaps aside from Sonic Sadhana (mentioned in Chapter III), Äänijooga is generally more flexible and more beneficial than the current similar practices. Obviously aesthetic tastes and sensibilities differ from individual to individual, but since Äänijooga is not meant to have appeal based solely on genre, and since the sonic aspect is designed specifically to encourage listening practices, it as a whole has a broader range of audiences and a bigger potential to expand and sustain itself as its own form. As a wellbeing practice, it has the capacity to surpass yoga performed to pre-recorded music, and provides a different approach to sound in a way that is more unobtrusive than the vast majority of music or sound played live along to a yoga class. Additionally, the way in which Äänijooga's yoga is guided is shaped by and interacts with the sound in a way that the vast majority of similar practices lack.



Figure 8. Leaning toward each other

VIII. ONWARDS

WHAT'S NEXT FOR ÄÄNIJOOGA

Throughout my time working on the development of this event series and practice, I have gained so much personally and professionally. Working with an idea that can bring people together, creating touching moments of connection between those who are otherwise basically strangers, and learning how to create spaces in which to help heal myself and others is something I want to continue with for a long time.

Äänijooga as a practice is still in what I believe to be the beginning stages: much more detailed studies regarding biofeedback, sonic and physical gesture in a yoga-specific context, and improved sonic design (both in aesthetic and algorithmic senses) are my next endeavours. More specific understanding about Yoga-based philosophies and the anatomical aspects involved in the practice of yoga are things that would greatly improve my ability to design an even more beneficial practice.

For years I have been daydreaming of being able to manage a space where wellbeing practices and artistic practices intermingle, and that aspiration has only become stronger with the prospect of developing Äänijooga into its own established method. Art can serve many purposes, including directly improving the quality of human life. Similarly, wellbeing practices can be expressive, creative, and by all means artistic. I want to continue to explore this crossroads.

In the meantime, Äänijooga as a series continues to grow. Performances in the coming months include Kiasma as part of the Ernesto Neto exhibit, and Kattilahalli as part of a festival and exhibit created by foreign artists living in Finland. Additionally, audiences are expanding to include Äänijooga events for children and young adults as a fun, interesting way to teach them about mindfulness and awareness.

With the development of multiple similar practices having emerged only with the last couple of years, I believe it is only a matter of a few more years until many different types of yoga studios begin incorporating live sound into their regular practices. Additionally, it is likely only a matter of time before listening practices become more popular on a recreational basis as the curiosity of the average individual increases, and the need for simple approaches to modern circumstances (such as noise pollution) continue. I hope to be able to openly share whatever

methods result from further practice and research in order to encourage as many people as possible to engage in similar wellbeing practices.

CONCLUSION

In the beginning of this project, I set about finding ways of incorporating elements of what I believed were two complementary wellbeing practices: listening methods as based on those developed Pauline Oliveros and R. Murray Schafer, and yoga practices derived from gentler forms such as Yin yoga and Slow Flow yoga. The purpose of this amalgamation was to create a new wellbeing form that was creative and inviting, and could offer more approaches to awareness and mindfulness than simply practicing yoga or listening exercises on their own. Through creating a continual event series and analysing four of the events, I was able to better understand not only if this practice was bigger than the sum of its parts, but also if what I was doing was able to provide a better alternative than the current sound/yoga practices.

Through the scope of somaesthetics, listening practices, expressive therapies, and the concept of the ecological body, I wanted to demonstrate the advantages of a philosophical and theoretical system based on treating the mind and body as one entity, as well as insisting that practice-based methods such Äänijooga are a necessary and crucial part of these views.

Through practice-based research, Äänijooga has proven itself to be successful as an event series and promising as a developing practice and method. It provides engaging, thoughtful new experiences for the majority of its participants, as well as offering safe, inviting spaces to explore new creative approaches to relaxation, awareness, connection, and healing.

GLOSSARY

SOUND

Additive synthesis: a sound synthesis technique that creates timbre by adding sine waves together.

Buffer: an object used in programs like MAX or Pure Data. The provides memory storage in which sound samples can be saved, edited, or referenced.

Chorus: an audio effect that duplicates an audio signal and plays back the original, plus the approximately (but not exactly) the same pitch or timbre duplicate.

Delay: an audio effect which takes an input signal, stores it, then plays it back after a selected period of time.

Filter: a device that passes or rejects frequencies within a certain range. Depending on the filter, some frequencies will become attenuated (such as a notch filter, which negates unwanted frequencies) or magnified (such as a resonant filter, which increases particular frequencies).

Granular synthesis: a method by which sounds are broken into tiny 'grains' (a sample usually lasting 10–50 milliseconds) and redistributed/reorganised to form other sounds.

Patch: the name of a file built using MAX. Synonymous with terms like 'sketch' or 'project' used in similar programs.

Ring modulation: an audio effect created by multiplying two signals, typically a sine wave or other simple waveform.

Slope: a parameter determining how fast and how steep the amplitude of a sound will be played.

Subtractive synthesis: a method of sound synthesis in which certain frequencies of an audio signal (often white noise) are reduced by a filter to alter the timbre of the sound.

Timbre: the quality given to a sound by its overtones, more easily described as tone or sound colour.

YOGA

Asana: a posture adopted in performing yoga.

Mudra: a symbolic hand gesture performed in Indian dance, religious ceremonies, or yoga.

Yoga (capitalised) versus yoga (lowercase): Yoga (capitalised) is used in this thesis specifically to refer to the religion and its religious elements. Yoga (lowercase) is used when referring to the modernised, physical, or spiritual (though not traditionally religious) elements.

BODY

Armouring: a concept originally proposed by somatic therapist Wilhelm Reich which refers to repetitive and often long-term patterns or tensions in behaviour or bodily posture that arise as defense mechanisms and can cause eventual bodily and mental damage.

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REFERENCES

Beken, Iskander. Personal interview. 28 March 2016.

Emre, Yunus. *The Drop That Became a Sea: Lyric Poems*. Trans. Kabir Helminski and Refik Algan. Boulder, Colorado, USA: Shambhala, 1999.

Hietanen, Jani. Personal interview. 11 March 2016.

Jäntti, Satu. Personal interview. 11 March 2016.

Kozel, Susan. *Closer: Performance, Technologies, Phenomenology*. Cambridge, MA, USA: MIT Press, 2007.

Lucier, Alvin. "I am Sitting in a Room." *I am Sitting in a Room*. Lovely Music, 1994. CD.

Lyytinen, Minna. Personal interview. 15 March 2016.

McEwan, Ian. *Saturday*. London, UK: Vintage, 2006.

Mäkinen, Petteri. Personal interview. 23 March 2016.

Massumi, Brian. *Parables for the Virtual: Movement, Affect, Sensation*. Durham, NC, USA: Duke University Press, 2002.

Maturana, H. and Varela, F.. *The Tree of Knowledge: The Biological Roots of Human Understanding*. Boston, MA, USA: Shambala Publications.

Montague, Gerard P.. *Who Am I? Who Is She?: A Naturalistic, Holistic, Somatic Approach to Personal Identity*. Hawthorne, NY, USA: Walter de Gruyter, 2013.

Oliveros, Pauline. *Sonic Meditations*. Sharon, VT, USA: Smith Publications, 1974.

---. *Deep listening introduction*. 24 June 2003. Web. 10 March 2016.
<http://ciufu.org/classes/ae_sp14/reading/deep_listening_intro.pdf>

Pallasmaa, Juhani. *The Eyes of the Skin*. Somerset, GB: Wiley, 2012.

Partanen, Reeta. "A little thesis request..." Message to the author. 28 March 2016. E-mail.

Preece, Timo. *Sonic Sadhana*. 2016. Web. 20 March 2016. <<http://www.sonicsadhana.com>>

Rilke, Rainer Maria. *Duino Elegies & Sonnets to Orpheus*. Trans. Stephen Mitchell. New York: Vintage International, 2009.

Reeve, Sandra. *Nine Ways of Seeing a Body*. Axminster, Devon, GBR: Triarchy Press, 2011.

Rossini, N.. *Reinterpreting Gesture as Language*. Amsterdam, NLD: IOS Press, 2012.

Schafer, R. M.. *Soundscape: Our Environment and the Tuning of the World*. Rochester, VT, USA: Destiny Books, 1994.

Schwartz, Barry. "The Paradox of Choice. TED. July 2012. Lecture.

Shusterman, Richard. *Body Consciousness: Toward a Philosophy of Mindfulness and Somaesthetics*. Cambridge, UK: Cambridge University Press, 2008.

Stern, Nathaniel. "The Implicit Body Through Explicit Action." *Perspectives: International Postgraduate Journal of Philosophy* 1.1 (2008): 22–42. Print.

Sundar, Sumathy. *Traditional Healing Systems and Modern Music Therapy in India*. Research Gate. December 2007. 5 March 2016.
<https://www.researchgate.net/profile/Sumathy_Sundar/publication/242391459_Traditional_healing_systems_and_modern_music_therapy_in_India/links/54be37300cf218da9391deb3.pdf>

Suokko, Elisa. Personal interview. 17 March 2016.

Taylor, Mark. 2001. "The Moment of Complexity: Emerging Network Culture"

Updike, John. *Facing Nature*. New York, NY, USA: Knopf Doubleday, 2012.

Wengell, Douglas, and Gabriel, Nathen. *Educational Opportunities in Integrative Medicine: The A to Z Healing Arts Guide and Professional Resource Directory*. Atlanta, GA, USA: The Hunter Press, 2008.

Wilson, Helen, and Pearson, Mark. Using Expressive Arts to Work with Mind, Body and Emotions. London, GB: Jessica Kingsley Publishers, 2009.